

Appendix B

Air Quality and Greenhouse Gas Information and Modeling



Unmitigated AQ Construction Emissions

SARCCUP

Emission Summary - Unmitigated

Project Components	Max Daily Emissions - Regional					
	ROG	NOX	CO	SO2	PM10	PM2.5
Arlington Recharge Extraction Wells (2019)	1.07	10.63	8.51	0.02	1.46	0.61
Arlington Recharge Extraction Wells (2020)	0.99	9.88	8.35	0.02	1.42	0.56
Arlington Recharge Pipeline/Facilities (2020)	3.70	36.36	32.00	0.06	2.41	1.84
Arlington Recharge Pipeline/Facilities (2021)	3.35	32.69	31.48	0.06	2.16	1.61
Arlington Recharge Pipeline/Facilities (2022)	3.02	28.75	31.05	0.06	1.92	1.38
Arlington Recharge Pipeline/Facilities (2023)	2.80	25.97	30.78	0.06	1.76	1.23
Canyon Pump Station (2020)	4.74	47.07	41.39	0.08	2.82	2.28
Canyon Pump Station (2021)	4.29	42.23	40.72	0.08	2.51	1.99
Canyon Pump Station (2022)	3.85	36.95	40.16	0.08	2.20	1.70
Canyon Pump Station (2023)	3.75	35.05	42.20	0.08	2.09	1.60
ID-4 CRA Crossing (2019)	1.34	12.77	9.21	0.02	1.39	0.72
ID-4 CRA Crossing (2020)	1.20	11.55	8.84	0.02	1.30	0.64
IEUA Well Site (2019)	3.28	32.46	26.20	0.06	1.99	1.64
IEUA Well Site (2020)	3.03	30.15	25.97	0.06	1.80	1.47
Arundo Removal (2019)	5.20	50.43	31.09	0.05	15.06	9.32
Arundo Removal (2020)	4.93	47.27	30.65	0.05	14.87	9.14
Arundo Removal (2021)	4.69	44.80	30.32	0.05	14.68	8.96
Arundo Maintenance (2021)	0.00	0.00	0.04	0.00	0.01	0.00
Arundo Maintenance (2022)	0.00	0.00	0.03	0.00	0.01	0.00
Arundo Maintenance (2023)	0.00	0.00	0.03	0.00	0.01	0.00

Overlapping Activities	Max Daily Emissions - Regional					
	ROG	NOX	CO	SO2	PM10	PM2.5
Arlington Wells + ID-4 + IEUA (2019)	5.69	55.85	43.92	0.11	4.83	2.97
Arlington Wells + ID-4 + IEUA + Arundo (2019)	10.89	106.28	75.00	0.16	19.90	12.28
Arlington Wells + ID-4 + IEUA + Arundo (2020)	10.16	98.86	73.81	0.16	19.39	11.80
Arlington Facilities + Canyon + IEUA + Arundo (2020)	16.40	160.85	130.01	0.25	21.90	14.72
Arlington Facilities + Canyon + Arundo (2020)	13.37	130.70	104.04	0.19	20.09	13.25
Arlington Facilities + Canyon + Arundo (2021)	12.32	119.72	102.52	0.18	19.34	12.56
Arlington Facilities + Canyon + Arundo M (2021)	7.64	74.92	72.24	0.13	4.68	3.60
Arlington Facilities + Canyon + Arundo M (2022)	6.87	65.70	71.24	0.13	4.13	3.09
Arlington Facilities + Canyon + Arundo M (2023)	6.55	61.03	73.02	0.14	3.86	2.83
Maximum	16.40	160.85	130.01	0.25	21.90	14.72
SCAQMD Regional Threshold	75.00	100.00	550.00	150.00	150.00	55.00
Exceeds Threshold?	No	Yes	No	No	No	No

Arlington Recharge

SARCCUP
Arlington Recharge
Unmitigated

Maximum Day

Phase	On-Site						Off-Site						Maximum Total					
	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Well Drilling (2019)	0.8834	8.898	6.9842	0.0175	1.0775	0.4927	0.1911	1.7314	1.5219	0.00664	0.3842	0.1129	1.0745	10.6294	8.5061	0.02414	1.4617	0.6056
Well Drilling (2020)	0.8206	8.2984	6.9666	0.0175	1.0307	0.4473	0.1728	1.5844	1.3832	0.00651	0.3843	0.1105	0.9934	9.8828	8.3498	0.02401	1.415	0.5578
Excavation and Shoring (2020)	1.7061	17.0895	16.1332	0.0274	1.0732	0.8415	0.1687	1.4602	1.3537	0.00621	0.3734	0.1071	1.8748	18.5497	17.4869	0.03361	1.4466	0.9486
Excavation and Shoring (2021)	1.5645	15.4147	15.9603	0.0274	0.9615	0.7372	0.1539	1.3247	1.2427	0.00609	0.3687	0.1028	1.7184	16.7394	17.203	0.03349	1.3302	0.84
Excavation and Shoring (2022)	1.4056	13.3789	15.7849	0.0274	0.8407	0.6248	0.1447	1.2537	1.1559	0.00596	0.3683	0.1025	1.5503	14.6326	16.9408	0.03336	1.209	0.7273
Excavation and Shoring (2023)	1.3119	12.1108	15.7135	0.0274	0.7611	0.5502	0.1292	0.9525	1.0615	0.00575	0.3683	0.1016	1.4411	13.0633	16.775	0.03315	1.1294	0.6518
Pipeline Installation (2020)	1.1809	11.3676	8.3407	0.0152	0.5647	0.5347	0.0104	0.316	0.0852	0.00077	0.0208	0.00705	1.1913	11.6836	8.4259	0.01597	0.5855	0.54175
Pipeline Installation (2021)	1.044	10.0518	8.1514	0.0152	0.4823	0.4568	0.00887	0.2873	0.0776	0.00076	0.0198	0.0061	1.05287	10.3391	8.229	0.01596	0.5021	0.4629
Pipeline Installation (2022)	0.9476	8.9272	8.0393	0.0152	0.4217	0.3994	0.00832	0.2729	0.0735	0.00075	0.0197	0.00603	0.95592	9.2001	8.1128	0.01595	0.4414	0.40543
Pipeline Installation (2023)	0.8815	8.1869	7.9688	0.0152	0.3775	0.3572	0.00618	0.2057	0.0651	0.00073	0.0194	0.00576	0.88768	8.3926	8.0339	0.01593	0.3969	0.36296
Building Construction (2020)	0.3976	3.6788	3.6913	0.00517	0.2405	0.2221	0	0	0	0	0	0	0.3976	3.6788	3.6913	0.00517	0.2405	0.2221
Building Construction (2021)	0.3607	3.3511	3.6594	0.00517	0.2062	0.1906	0	0	0	0	0	0	0.3607	3.3511	3.6594	0.00517	0.2062	0.1906
Building Construction (2022)	0.3224	3.0067	3.623	0.00517	0.1707	0.1579	0	0	0	0	0	0	0.3224	3.0067	3.623	0.00517	0.1707	0.1579
Building Construction (2023)	0.298	2.7715	3.6074	0.00518	0.1459	0.135	0	0	0	0	0	0	0.298	2.7715	3.6074	0.00518	0.1459	0.135
Street Restoration (2020)	0.2354	2.4457	2.3958	0.00366	0.1347	0.1239	0	0	0	0	0	0	0.2354	2.4457	2.3958	0.00366	0.1347	0.1239
Street Restoration (2021)	0.2179	2.2596	2.3926	0.00366	0.1215	0.1118	0	0	0	0	0	0	0.2179	2.2596	2.3926	0.00366	0.1215	0.1118
Street Restoration (2022)	0.1866	1.9124	2.3721	0.00366	0.0996	0.0916	0	0	0	0	0	0	0.1866	1.9124	2.3721	0.00366	0.0996	0.0916
Street Restoration (2023)	0.1728	1.7465	2.3677	0.00366	0.0886	0.0815	0	0	0	0	0	0	0.1728	1.7465	2.3677	0.00366	0.0886	0.0815

Localized Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
Well Drilling (2019)	0.8834	8.898	6.9842	0.0175	1.0775	0.4927
Well Drilling (2020)	0.8206	8.2984	6.9666	0.0175	1.0307	0.4473
All Other (2020)	3.52	34.5816	30.561	0.05143	2.0131	1.7222
All Other (2021)	3.1871	31.0772	30.1637	0.05143	1.7715	1.4964
All Other (2022)	2.8622	27.2252	29.8193	0.05143	1.5327	1.2737
All Other (2023)	2.6642	24.8157	29.6574	0.05144	1.3731	1.1239
Maximum	3.52	34.5816	30.561	0.05144	2.0131	1.7222

SCAQMD LST Threshold (SRA 23)

1-Acre @ 25 Meters	N/A	118	602	N/A	4	3
Exceeds Threshold?	N/A	No	No	N/A	No	No

Regional Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
Well Drilling (2019)	1.0745	10.6294	8.5061	0.02414	1.4617	0.6056
Well Drilling (2020)	0.9934	9.8828	8.3498	0.02401	1.415	0.5578
All Other (2020)	3.6991	36.3578	31.9999	0.05841	2.4073	1.83635
All Other (2021)	3.34987	32.6892	31.484	0.05828	2.16	1.6053
All Other (2022)	3.01522	28.7518	31.0487	0.05814	1.9207	1.38223
All Other (2023)	2.79958	25.9739	30.784	0.05792	1.7608	1.23126
Maximum	3.6991	36.3578	31.9999	0.05841	2.4073	1.83635
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

SARCCUP: Arlington Recharge - South Coast Air Basin, Summer

SARCCUP: Arlington Recharge
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	10,000.00	User Defined Unit	2.00	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Two Pump stations: Assume approximately 5,000 SF and 1 acre each

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases except Well Drilling occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway/Water Trucks included as Vendor Trucks.

Grading - Assume 0.5 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	5,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	15,000.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	200.00	850.00
tblConstructionPhase	NumDays	4.00	850.00
tblConstructionPhase	NumDays	10.00	850.00
tblConstructionPhase	NumDays	2.00	260.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	10,000.00
tblLandUse	LotAcreage	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	13.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	25.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	4.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.0601	10.6187	8.5061	0.0241	1.0074	0.4541	1.4616	0.1692	0.4363	0.6054	0.0000	2,389.2040	2,389.2040	0.4164	0.0000	2,399.6144
2020	3.6855	36.3508	31.9916	0.0584	1.0110	1.8285	2.4071	0.1701	1.7111	1.8362	0.0000	5,636.3903	5,636.3903	1.3522	0.0000	5,670.1951
2021	3.3369	32.6853	31.4761	0.0582	0.5782	1.5818	2.1600	0.1250	1.4802	1.6052	0.0000	5,624.0014	5,624.0014	1.3437	0.0000	5,657.5931
2022	3.0027	28.7492	31.0413	0.0581	0.5782	1.3426	1.9208	0.1250	1.2571	1.3821	0.0000	5,611.0504	5,611.0504	1.3380	0.0000	5,644.4999
2023	2.7879	25.9732	30.7784	0.0579	0.5795	1.1812	1.7607	0.1253	1.1058	1.2312	0.0000	5,588.7829	5,588.7829	1.3296	0.0000	5,622.0224
Maximum	3.6855	36.3508	31.9916	0.0584	1.0110	1.8285	2.4071	0.1701	1.7111	1.8362	0.0000	5,636.3903	5,636.3903	1.3522	0.0000	5,670.1951

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	3/27/2020	5	260	
2	Architectural Coating	Architectural Coating	2/25/2020	2/24/2020	5	0	
3	Excavation and Shoring	Grading	3/30/2020	6/30/2023	5	850	
4	Pipeline Installation	Trenching	3/30/2020	6/30/2023	5	850	
5	Building Construction	Building Construction	3/30/2020	6/30/2023	5	850	
6	Street Restoration	Paving	3/30/2020	6/30/2023	5	850	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Concrete/Industrial Saws	0	8.00	81	0.73
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38
Well Drilling	Rubber Tired Dozers	0	8.00	247	0.40
Well Drilling	Scrapers	0	8.00	367	0.48
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38
Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Scrapers	0	8.00	367	0.48
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Graders	0	8.00	187	0.41
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Rubber Tired Dozers	0	8.00	247	0.40
Pipeline Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	8.00	231	0.29

Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	25.00	13.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Well Drilling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6363	0.0000	0.6363	0.0687	0.0000	0.0687			0.0000			0.0000
Off-Road	0.8834	8.8980	6.9842	0.0175		0.4412	0.4412		0.4240	0.4240	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329
Total	0.8834	8.8980	6.9842	0.0175	0.6363	0.4412	1.0775	0.0687	0.4240	0.4927	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	8.3000e-004	0.0286	5.7300e-003	8.0000e-005	2.0900e-003	1.1000e-004	2.1900e-003	5.6000e-004	1.0000e-004	6.6000e-004		8.1817	8.1817	5.9000e-004			8.1964
Vendor	0.0546	1.6071	0.3963	3.6000e-003	0.0896	0.0107	0.1002	0.0258	0.0102	0.0360		384.3170	384.3170	0.0259			384.9635
Worker	0.1214	0.0849	1.1198	2.9600e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		295.0904	295.0904	9.2500e-003			295.3216
Total	0.1768	1.7207	1.5219	6.6400e-003	0.3711	0.0130	0.3841	0.1005	0.0123	0.1128		687.5891	687.5891	0.0357			688.4815

3.2 Well Drilling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.6363	0.0000	0.6363	0.0687	0.0000	0.0687			0.0000				0.0000
Off-Road	0.8206	8.2984	6.9666	0.0175		0.3944	0.3944		0.3785	0.3785	0.0000	1,680.8723	1,680.8723	0.3772			1,690.3025
Total	0.8206	8.2984	6.9666	0.0175	0.6363	0.3944	1.0307	0.0687	0.3785	0.4473	0.0000	1,680.8723	1,680.8723	0.3772			1,690.3025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	7.7000e-004	0.0268	5.5700e-003	7.0000e-005	5.6500e-003	9.0000e-005	5.7400e-003	1.4400e-003	8.0000e-005	1.5200e-003		8.1000	8.1000	5.7000e-004			8.1143
Vendor	0.0465	1.4745	0.3587	3.5700e-003	0.0896	7.3000e-003	0.0969	0.0258	6.9800e-003	0.0328		381.9078	381.9078	0.0244			382.5190
Worker	0.1121	0.0758	1.0190	2.8700e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		285.9591	285.9591	8.2400e-003			286.1651
Total	0.1594	1.5771	1.3832	6.5100e-003	0.3747	9.5200e-003	0.3842	0.1013	9.0200e-003	0.1104		675.9669	675.9669	0.0333			676.7984

3.3 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Excavation and Shoring - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	1.7061	17.0895	16.1332	0.0274		0.8782	0.8782		0.8204	0.8204	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618
Total	1.7061	17.0895	16.1332	0.0274	0.1950	0.8782	1.0732	0.0211	0.8204	0.8415	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.3000e-004	8.1900e-003	1.7000e-003	2.0000e-005	1.7900e-003	3.0000e-005	1.8100e-003	4.5000e-004	3.0000e-005	4.8000e-004		2.4777	2.4777	1.8000e-004		2.4820
Vendor	0.0432	1.3692	0.3331	3.3200e-003	0.0832	6.7800e-003	0.0900	0.0240	6.4800e-003	0.0304		354.6287	354.6287	0.0227		355.1962
Worker	0.1121	0.0758	1.0190	2.8700e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		285.9591	285.9591	8.2400e-003		286.1651
Total	0.1555	1.4532	1.3537	6.2100e-003	0.3644	8.9400e-003	0.3733	0.0985	8.4700e-003	0.1070		643.0654	643.0654	0.0311		643.8433

3.4 Excavation and Shoring - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	1.5645	15.4147	15.9603	0.0274		0.7665	0.7665		0.7161	0.7161	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654
Total	1.5645	15.4147	15.9603	0.0274	0.1950	0.7665	0.9615	0.0211	0.7161	0.7372	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2000e-004	7.6300e-003	1.6800e-003	2.0000e-005	1.3900e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4508	2.4508	1.7000e-004		2.4551
Vendor	0.0366	1.2450	0.3023	3.2900e-003	0.0832	2.5400e-003	0.0857	0.0240	2.4300e-003	0.0264		351.9669	351.9669	0.0218		352.5110
Worker	0.1046	0.0682	0.9387	2.7800e-003	0.2794	2.0700e-003	0.2815	0.0741	1.9000e-003	0.0760		276.7246	276.7246	7.4600e-003		276.9110
Total	0.1414	1.3209	1.2427	6.0900e-003	0.3640	4.6300e-003	0.3687	0.0984	4.3500e-003	0.1028		631.1422	631.1422	0.0294		631.8771

3.4 Excavation and Shoring - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	1.4056	13.3789	15.7849	0.0274		0.6458	0.6458		0.6037	0.6037	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456
Total	1.4056	13.3789	15.7849	0.0274	0.1950	0.6458	0.8407	0.0211	0.6037	0.6248	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1000e-004	7.0600e-003	1.6700e-003	2.0000e-005	1.4000e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4216	2.4216	1.7000e-004		2.4258
Vendor	0.0343	1.1825	0.2862	3.2600e-003	0.0832	2.2100e-003	0.0854	0.0240	2.1200e-003	0.0261		348.8813	348.8813	0.0210		349.4067
Worker	0.0982	0.0617	0.8680	2.6800e-003	0.2794	2.0100e-003	0.2815	0.0741	1.8500e-003	0.0760		266.8158	266.8158	6.7400e-003		266.9844
Total	0.1327	1.2512	1.1559	5.9600e-003	0.3640	4.2400e-003	0.3683	0.0984	3.9900e-003	0.1024		618.1187	618.1187	0.0279		618.8169

3.4 Excavation and Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	1.3119	12.1108	15.7135	0.0274		0.5661	0.5661		0.5291	0.5291	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393
Total	1.3119	12.1108	15.7135	0.0274	0.1950	0.5661	0.7611	0.0211	0.5291	0.5502	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.5500e-003	1.5200e-003	2.0000e-005	2.6700e-003	1.0000e-005	2.6800e-003	6.7000e-004	1.0000e-005	6.8000e-004		2.3223	2.3223	1.6000e-004		2.3262
Vendor	0.0255	0.8915	0.2584	3.1500e-003	0.0832	1.0200e-003	0.0842	0.0240	9.8000e-004	0.0249		338.0474	338.0474	0.0186		338.5119
Worker	0.0923	0.0558	0.8016	2.5800e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8000e-003	0.0759		256.8775	256.8775	6.0800e-003		257.0295
Total	0.1179	0.9518	1.0615	5.7500e-003	0.3653	2.9900e-003	0.3683	0.0987	2.7900e-003	0.1015		597.2472	597.2472	0.0248		597.8676

3.5 Pipeline Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1809	11.3676	8.3407	0.0152		0.5647	0.5647		0.5347	0.5347	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710
Total	1.1809	11.3676	8.3407	0.0152		0.5647	0.5647		0.5347	0.5347	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003		81.9684
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003		81.9684

3.5 Pipeline Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0440	10.0518	8.1514	0.0152		0.4823	0.4823		0.4568	0.4568	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138
Total	1.0440	10.0518	8.1514	0.0152		0.4823	0.4823		0.4568	0.4568	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003		81.3487
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003		81.3487

3.5 Pipeline Installation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9476	8.9272	8.0393	0.0152		0.4217	0.4217		0.3994	0.3994	0.0000	1,438.8860	1,438.8860	0.3153		1,446.785
Total	0.9476	8.9272	8.0393	0.0152		0.4217	0.4217		0.3994	0.3994	0.0000	1,438.8860	1,438.8860	0.3153		1,446.785

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003		80.6323
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003		80.6323

3.5 Pipeline Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8815	8.1869	7.9688	0.0152		0.3775	0.3775		0.3572	0.3572	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390
Total	0.8815	8.1869	7.9688	0.0152		0.3775	0.3775		0.3572	0.3572	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3976	3.6788	3.6913	5.1700e-003		0.2405	0.2405		0.2221	0.2221	0.0000	486.6866	486.6866	0.1491		490.4137
Total	0.3976	3.6788	3.6913	5.1700e-003		0.2405	0.2405		0.2221	0.2221	0.0000	486.6866	486.6866	0.1491		490.4137

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3607	3.3511	3.6594	5.1700e-003		0.2062	0.2062		0.1906	0.1906	0.0000	486.8181	486.8181	0.1491		490.5463
Total	0.3607	3.3511	3.6594	5.1700e-003		0.2062	0.2062		0.1906	0.1906	0.0000	486.8181	486.8181	0.1491		490.5463

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3224	3.0067	3.6230	5.1700e-003		0.1707	0.1707		0.1579	0.1579	0.0000	487.1570	487.1570	0.1492			490.8879
Total	0.3224	3.0067	3.6230	5.1700e-003		0.1707	0.1707		0.1579	0.1579	0.0000	487.1570	487.1570	0.1492			490.8879

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2980	2.7715	3.6074	5.1800e-003		0.1459	0.1459		0.1350	0.1350	0.0000	487.4946	487.4946	0.1494		491.2282
Total	0.2980	2.7715	3.6074	5.1800e-003		0.1459	0.1459		0.1350	0.1350	0.0000	487.4946	487.4946	0.1494		491.2282

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2354	2.4457	2.3958	3.6600e-003		0.1347	0.1347		0.1239	0.1239	0.0000	354.6693	354.6693	0.1147		357.5370
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2354	2.4457	2.3958	3.6600e-003		0.1347	0.1347		0.1239	0.1239	0.0000	354.6693	354.6693	0.1147		357.5370

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2179	2.2596	2.3926	3.6600e-003		0.1215	0.1215		0.1118	0.1118	0.0000	354.5749	354.5749	0.1147		357.4418
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2179	2.2596	2.3926	3.6600e-003		0.1215	0.1215		0.1118	0.1118	0.0000	354.5749	354.5749	0.1147		357.4418

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1866	1.9124	2.3721	3.6600e-003		0.0996	0.0996		0.0916	0.0916	0.0000	354.6809	354.6809	0.1147		357.5487
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1866	1.9124	2.3721	3.6600e-003		0.0996	0.0996		0.0916	0.0916	0.0000	354.6809	354.6809	0.1147		357.5487

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1728	1.7465	2.3677	3.6600e-003		0.0886	0.0886		0.0815	0.0815	0.0000	354.6625	354.6625	0.1147		357.5301
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1728	1.7465	2.3677	3.6600e-003		0.0886	0.0886		0.0815	0.0815	0.0000	354.6625	354.6625	0.1147		357.5301

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

SARCCUP: Arlington Recharge - South Coast Air Basin, Winter

SARCCUP: Arlington Recharge
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	10,000.00	User Defined Unit	2.00	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Two Pump stations: Assume approximately 5,000 SF and 1 acre each

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases except Well Drilling occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway/Water Trucks included as Vendor Trucks.

Grading - Assume 0.5 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	5,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	15,000.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	200.00	850.00
tblConstructionPhase	NumDays	4.00	850.00
tblConstructionPhase	NumDays	10.00	850.00
tblConstructionPhase	NumDays	2.00	260.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	10,000.00
tblLandUse	LotAcreage	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	13.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	25.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	4.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.0744	10.6294	8.4467	0.0238	1.0074	0.4543	1.4617	0.1692	0.4364	0.6056	0.0000	2,360.4454	2,360.4454	0.4177	0.0000	2,370.8870
2020	3.6991	36.3577	31.9410	0.0581	1.0110	1.8286	2.4072	0.1701	1.7112	1.8363	0.0000	5,606.7394	5,606.7394	1.3536	0.0000	5,640.5794
2021	3.3498	32.6885	31.4288	0.0579	0.5782	1.5819	2.1601	0.1250	1.4803	1.6053	0.0000	5,594.9806	5,594.9806	1.3450	0.0000	5,628.6066
2022	3.0152	28.7509	30.9972	0.0578	0.5782	1.3426	1.9208	0.1250	1.2572	1.3822	0.0000	5,582.6804	5,582.6804	1.3393	0.0000	5,616.1630
2023	2.7995	25.9728	30.7292	0.0576	0.5795	1.1813	1.7608	0.1253	1.1059	1.2312	0.0000	5,561.5785	5,561.5785	1.3306	0.0000	5,594.8427
Maximum	3.6991	36.3577	31.9410	0.0581	1.0110	1.8286	2.4072	0.1701	1.7112	1.8363	0.0000	5,606.7394	5,606.7394	1.3536	0.0000	5,640.5794

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	3/27/2020	5	260	
2	Architectural Coating	Architectural Coating	2/25/2020	2/24/2020	5	0	
3	Excavation and Shoring	Grading	3/30/2020	6/30/2023	5	850	
4	Pipeline Installation	Trenching	3/30/2020	6/30/2023	5	850	
5	Building Construction	Building Construction	3/30/2020	6/30/2023	5	850	
6	Street Restoration	Paving	3/30/2020	6/30/2023	5	850	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Concrete/Industrial Saws	0	8.00	81	0.73
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38
Well Drilling	Rubber Tired Dozers	0	8.00	247	0.40
Well Drilling	Scrapers	0	8.00	367	0.48
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38
Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Scrapers	0	8.00	367	0.48
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Graders	0	8.00	187	0.41
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Rubber Tired Dozers	0	8.00	247	0.40
Pipeline Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	8.00	231	0.29

Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	25.00	13.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Well Drilling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6363	0.0000	0.6363	0.0687	0.0000	0.0687			0.0000			0.0000
Off-Road	0.8834	8.8980	6.9842	0.0175		0.4412	0.4412		0.4240	0.4240	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329
Total	0.8834	8.8980	6.9842	0.0175	0.6363	0.4412	1.0775	0.0687	0.4240	0.4927	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.5000e-004	0.0290	6.1500e-003	7.0000e-005	2.0900e-003	1.1000e-004	2.2000e-003	5.6000e-004	1.0000e-004	6.6000e-004		8.0442	8.0442	6.1000e-004		8.0594
Vendor	0.0569	1.6091	0.4389	3.5000e-003	0.0896	0.0108	0.1004	0.0258	0.0104	0.0361		373.9945	373.9945	0.0277		374.6859
Worker	0.1333	0.0933	1.0174	2.7800e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		276.7918	276.7918	8.6800e-003		277.0088
Total	0.1911	1.7314	1.4625	6.3500e-003	0.3711	0.0131	0.3842	0.1005	0.0125	0.1129		658.8305	658.8305	0.0370		659.7541

3.2 Well Drilling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6363	0.0000	0.6363	0.0687	0.0000	0.0687			0.0000			0.0000
Off-Road	0.8206	8.2984	6.9666	0.0175		0.3944	0.3944		0.3785	0.3785	0.0000	1,680.8723	1,680.8723	0.3772		1,690.3025
Total	0.8206	8.2984	6.9666	0.0175	0.6363	0.3944	1.0307	0.0687	0.3785	0.4473	0.0000	1,680.8723	1,680.8723	0.3772		1,690.3025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.9000e-004	0.0271	5.9500e-003	7.0000e-005	5.6500e-003	9.0000e-005	5.7400e-003	1.4400e-003	8.0000e-005	1.5200e-003		7.9617	7.9617	6.0000e-004		7.9765
Vendor	0.0486	1.4740	0.3974	3.4800e-003	0.0896	7.4100e-003	0.0970	0.0258	7.0900e-003	0.0329		371.5284	371.5284	0.0261		372.1815
Worker	0.1234	0.0833	0.9240	2.6900e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		268.2128	268.2128	7.7200e-003		268.4058
Total	0.1728	1.5844	1.3273	6.2400e-003	0.3747	9.6300e-003	0.3843	0.1013	9.1300e-003	0.1105		647.7028	647.7028	0.0345		648.5638

3.3 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Excavation and Shoring - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	1.7061	17.0895	16.1332	0.0274		0.8782	0.8782		0.8204	0.8204	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618
Total	1.7061	17.0895	16.1332	0.0274	0.1950	0.8782	1.0732	0.0211	0.8204	0.8415	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4000e-004	8.3000e-003	1.8200e-003	2.0000e-005	1.7900e-003	3.0000e-005	1.8100e-003	4.5000e-004	3.0000e-005	4.8000e-004		2.4353	2.4353	1.8000e-004		2.4399
Vendor	0.0451	1.3687	0.3690	3.2300e-003	0.0832	6.8800e-003	0.0901	0.0240	6.5800e-003	0.0305		344.9906	344.9906	0.0243		345.5971
Worker	0.1234	0.0833	0.9240	2.6900e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		268.2128	268.2128	7.7200e-003		268.4058
Total	0.1687	1.4602	1.2948	5.9400e-003	0.3644	9.0400e-003	0.3734	0.0985	8.5700e-003	0.1071		615.6388	615.6388	0.0322		616.4428

3.4 Excavation and Shoring - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	1.5645	15.4147	15.9603	0.0274		0.7665	0.7665		0.7161	0.7161	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654
Total	1.5645	15.4147	15.9603	0.0274	0.1950	0.7665	0.9615	0.0211	0.7161	0.7372	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.3000e-004	7.7200e-003	1.7900e-003	2.0000e-005	1.3900e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4087	2.4087	1.8000e-004		2.4132
Vendor	0.0384	1.2420	0.3360	3.2000e-003	0.0832	2.6200e-003	0.0858	0.0240	2.5100e-003	0.0265		342.3859	342.3859	0.0233		342.9674
Worker	0.1153	0.0749	0.8497	2.6000e-003	0.2794	2.0700e-003	0.2815	0.0741	1.9000e-003	0.0760		259.5378	259.5378	6.9800e-003		259.7123
Total	0.1539	1.3247	1.1875	5.8200e-003	0.3640	4.7100e-003	0.3687	0.0984	4.4300e-003	0.1028		604.3324	604.3324	0.0304		605.0929

3.4 Excavation and Shoring - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	1.4056	13.3789	15.7849	0.0274		0.6458	0.6458		0.6037	0.6037	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456
Total	1.4056	13.3789	15.7849	0.0274	0.1950	0.6458	0.8407	0.0211	0.6037	0.6248	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2000e-004	7.1400e-003	1.7700e-003	2.0000e-005	1.4000e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.3796	2.3796	1.8000e-004		2.3840
Vendor	0.0361	1.1789	0.3183	3.1700e-003	0.0832	2.2800e-003	0.0855	0.0240	2.1800e-003	0.0261		339.3287	339.3287	0.0224		339.8898
Worker	0.1084	0.0677	0.7844	2.5100e-003	0.2794	2.0100e-003	0.2815	0.0741	1.8500e-003	0.0760		250.2447	250.2447	6.3000e-003		250.4023
Total	0.1447	1.2537	1.1044	5.7000e-003	0.3640	4.3100e-003	0.3683	0.0984	4.0500e-003	0.1025		591.9531	591.9531	0.0289		592.6762

3.4 Excavation and Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	1.3119	12.1108	15.7135	0.0274		0.5661	0.5661		0.5291	0.5291	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393
Total	1.3119	12.1108	15.7135	0.0274	0.1950	0.5661	0.7611	0.0211	0.5291	0.5502	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.5800e-003	1.5900e-003	2.0000e-005	2.6700e-003	1.0000e-005	2.6800e-003	6.7000e-004	1.0000e-005	6.8000e-004		2.2823	2.2823	1.6000e-004		2.2864
Vendor	0.0268	0.8867	0.2823	3.0700e-003	0.0832	1.0700e-003	0.0843	0.0240	1.0300e-003	0.0250		328.9392	328.9392	0.0197		329.4318
Worker	0.1023	0.0612	0.7229	2.4200e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8000e-003	0.0759		240.9232	240.9232	5.6800e-003		241.0652
Total	0.1292	0.9525	1.0068	5.5100e-003	0.3653	3.0400e-003	0.3683	0.0987	2.8400e-003	0.1016		572.1446	572.1446	0.0256		572.7834

3.5 Pipeline Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1809	11.3676	8.3407	0.0152		0.5647	0.5647		0.5347	0.5347	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710
Total	1.1809	11.3676	8.3407	0.0152		0.5647	0.5647		0.5347	0.5347	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003		79.7532
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003		79.7532

3.5 Pipeline Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0440	10.0518	8.1514	0.0152		0.4823	0.4823		0.4568	0.4568	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138
Total	1.0440	10.0518	8.1514	0.0152		0.4823	0.4823		0.4568	0.4568	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003		79.1463
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003		79.1463

3.5 Pipeline Installation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9476	8.9272	8.0393	0.0152		0.4217	0.4217		0.3994	0.3994	0.0000	1,438.8860	1,438.8860	0.3153		1,446.785
Total	0.9476	8.9272	8.0393	0.0152		0.4217	0.4217		0.3994	0.3994	0.0000	1,438.8860	1,438.8860	0.3153		1,446.785

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361

3.5 Pipeline Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8815	8.1869	7.9688	0.0152		0.3775	0.3775		0.3572	0.3572	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390
Total	0.8815	8.1869	7.9688	0.0152		0.3775	0.3775		0.3572	0.3572	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003		76.0227
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003		76.0227

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3976	3.6788	3.6913	5.1700e-003		0.2405	0.2405		0.2221	0.2221	0.0000	486.6866	486.6866	0.1491		490.4137
Total	0.3976	3.6788	3.6913	5.1700e-003		0.2405	0.2405		0.2221	0.2221	0.0000	486.6866	486.6866	0.1491		490.4137

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3607	3.3511	3.6594	5.1700e-003		0.2062	0.2062		0.1906	0.1906	0.0000	486.8181	486.8181	0.1491		490.5463
Total	0.3607	3.3511	3.6594	5.1700e-003		0.2062	0.2062		0.1906	0.1906	0.0000	486.8181	486.8181	0.1491		490.5463

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3224	3.0067	3.6230	5.1700e-003		0.1707	0.1707		0.1579	0.1579	0.0000	487.1570	487.1570	0.1492			490.8879
Total	0.3224	3.0067	3.6230	5.1700e-003		0.1707	0.1707		0.1579	0.1579	0.0000	487.1570	487.1570	0.1492			490.8879

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2980	2.7715	3.6074	5.1800e-003		0.1459	0.1459		0.1350	0.1350	0.0000	487.4946	487.4946	0.1494		491.2282
Total	0.2980	2.7715	3.6074	5.1800e-003		0.1459	0.1459		0.1350	0.1350	0.0000	487.4946	487.4946	0.1494		491.2282

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2354	2.4457	2.3958	3.6600e-003		0.1347	0.1347		0.1239	0.1239	0.0000	354.6693	354.6693	0.1147		357.5370
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2354	2.4457	2.3958	3.6600e-003		0.1347	0.1347		0.1239	0.1239	0.0000	354.6693	354.6693	0.1147		357.5370

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2179	2.2596	2.3926	3.6600e-003		0.1215	0.1215		0.1118	0.1118	0.0000	354.5749	354.5749	0.1147		357.4418
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2179	2.2596	2.3926	3.6600e-003		0.1215	0.1215		0.1118	0.1118	0.0000	354.5749	354.5749	0.1147		357.4418

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1866	1.9124	2.3721	3.6600e-003		0.0996	0.0996		0.0916	0.0916	0.0000	354.6809	354.6809	0.1147		357.5487
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1866	1.9124	2.3721	3.6600e-003		0.0996	0.0996		0.0916	0.0916	0.0000	354.6809	354.6809	0.1147		357.5487

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1728	1.7465	2.3677	3.6600e-003		0.0886	0.0886		0.0815	0.0815	0.0000	354.6625	354.6625	0.1147		357.5301
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1728	1.7465	2.3677	3.6600e-003		0.0886	0.0886		0.0815	0.0815	0.0000	354.6625	354.6625	0.1147		357.5301

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Arundo Removal

SARCCUP
 Arundo Removal
 Unmitigated

Maximum Day

Phase	On-Site						Off-Site						Maximum Total					
	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Mowing/Clearing/Grubbing (2019)	5.1339	50.1614	30.5357	0.0496	14.9255	9.2785	0.0615	0.2672	0.5045	0.0017	0.127	0.0356	5.1954	50.4286	31.0402	0.0513	15.0525	9.3141
Mowing/Clearing/Grubbing (2020)	4.8693	47.0262	30.1485	0.0497	14.7294	9.0979	0.0563	0.2439	0.4588	0.00166	0.1265	0.0351	4.9256	47.2701	30.6073	0.05136	14.8559	9.133
Mowing/Clearing/Grubbing (2021)	4.6307	44.5763	29.858	0.0497	14.5411	8.9247	0.052	0.2211	0.422	0.00162	0.1258	0.0345	4.6827	44.7974	30.28	0.05132	14.6669	8.9592
Maintenance/Monitoring (2019)	0	0	0	0	0	0	0.00533	0.00373	0.0448	0.00012	0.0113	0.00304	0.00533	0.00373	0.0448	0.00012	0.0113	0.00304
Maintenance/Monitoring (2020)	0	0	0	0	0	0	0.00493	0.00333	0.0408	0.00011	0.0113	0.00304	0.00493	0.00333	0.0408	0.00011	0.0113	0.00304
Maintenance/Monitoring (2021)	0	0	0	0	0	0	0.00461	0.003	0.0376	0.00011	0.0113	0.00304	0.00461	0.003	0.0376	0.00011	0.0113	0.00304
Maintenance/Monitoring (2022)	0	0	0	0	0	0	0.00434	0.00271	0.0347	0.00011	0.0113	0.00304	0.00434	0.00271	0.0347	0.00011	0.0113	0.00304
Maintenance/Monitoring (2023)	0	0	0	0	0	0	0.00409	0.00245	0.0321	0.0001	0.0113	0.00304	0.00409	0.00245	0.0321	0.0001	0.0113	0.00304

Localized Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2019)	5.1339	50.1614	30.5357	0.0496	14.9255	9.2785
All Phases (2020)	4.8693	47.0262	30.1485	0.0497	14.7294	9.0979
All Phases (2021)	4.6307	44.5763	29.858	0.0497	14.5411	8.9247
Maintenance (2021)	0	0	0	0	0	0
Maintenance (2022)	0	0	0	0	0	0
Maintenance (2023)	0	0	0	0	0	0
Maximum	5.1339	50.1614	30.5357	0.0497	14.9255	9.2785
SCAQMD LST Threshold (SRA 22)						
5 Acres at 50 Meters	N/A	302	2470	N/A	37	11
Exceeds Threshold?	N/A	No	No	N/A	No	No
SCAQMD LST Threshold (SRA 23)						
5 Acres at 50 Meters	N/A	302	2178	N/A	40	10
Exceeds Threshold?	N/A	No	No	N/A	No	No

Regional Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2019)	5.20073	50.43233	31.085	0.05142	15.0638	9.31714
All Phases (2020)	4.93053	47.27343	30.6481	0.05147	14.8672	9.13604
All Phases (2021)	4.68731	44.8004	30.3176	0.05143	14.6782	8.96224
Maintenance (2021)	0.00461	0.003	0.0376	0.00011	0.0113	0.00304
Maintenance (2022)	0.00434	0.00271	0.0347	0.00011	0.0113	0.00304
Maintenance (2023)	0.00409	0.00245	0.0321	0.0001	0.0113	0.00304
Maximum	5.20073	50.43233	31.085	0.05147	15.0638	9.31714
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Arundo Removal - South Coast Air Basin, Summer

Arundo Removal
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	640.00	User Defined Unit	640.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Arundo Removal along Santa Ana River
- Construction Phase - Project-Specific Schedule
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment - Project-Specific Equipment
- Trips and VMT - Project-Specific Daily Maximum. Off-Highway Trucks included as Vendor Trucks
- Demolition -
- Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	420.00	478.00
tblConstructionPhase	NumDays	420.00	1,000.00
tblConstructionPhase	PhaseEndDate	4/9/2021	6/30/2021
tblConstructionPhase	PhaseEndDate	11/18/2022	6/30/2023
tblConstructionPhase	PhaseStartDate	4/10/2021	9/2/2019
tblLandUse	LotAcreage	0.00	640.00
tblOffRoadEquipment	HorsePower	172.00	88.00
tblOffRoadEquipment	LoadFactor	0.42	0.34
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	40.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	1.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.1951	50.4283	31.0850	0.0515	12.1799	2.8838	15.0638	6.6567	2.6604	9.3171	0.0000	5,036.8870	5,036.8870	1.4792	0.0000	5,073.8678
2020	4.9253	47.2702	30.6481	0.0514	12.1799	2.6872	14.8671	6.6567	2.4793	9.1361	0.0000	4,935.8989	4,935.8989	1.4793	0.0000	4,972.8816
2021	4.6823	44.7979	30.3175	0.0514	12.1799	2.4983	14.6782	6.6567	2.3054	8.9622	0.0000	4,931.9105	4,931.9105	1.4790	0.0000	4,968.8849

2022	3.9300e-003	2.4700e-003	0.0347	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	10.6726	10.6726	2.7000e-004	0.0000	10.6794
2023	3.6900e-003	2.2300e-003	0.0321	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	10.2751	10.2751	2.4000e-004	0.0000	10.2812
Maximum	5.1951	50.4283	31.0850	0.0515	12.1799	2.8838	15.0638	6.6567	2.6604	9.3171	0.0000	5,036.8870	5,036.8870	1.4793	0.0000	5,073.8678

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mowing/Clearing/Grubbing	Site Preparation	9/2/2019	6/30/2021	5	478	
2	Maintenance/Monitoring	Site Preparation	9/2/2019	6/30/2023	5	1000	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mowing/Clearing/Grubbing	Dumpers/Tenders	5	8.00	16	0.38
Mowing/Clearing/Grubbing	Excavators	2	8.00	158	0.38
Mowing/Clearing/Grubbing	Off-Highway Trucks	0	8.00	402	0.38
Mowing/Clearing/Grubbing	Other Construction Equipment	6	8.00	88	0.34
Mowing/Clearing/Grubbing	Rubber Tired Dozers	0	8.00	247	0.40
Mowing/Clearing/Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Mowing/Clearing/Grubbing	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Maintenance/Monitoring	Cranes	0	7.00	231	0.29
Maintenance/Monitoring	Forklifts	0	8.00	89	0.20
Maintenance/Monitoring	Generator Sets	0	8.00	84	0.74
Maintenance/Monitoring	Off-Highway Trucks	0	4.00	402	0.38

Maintenance/Monitoring	Rubber Tired Dozers	0	8.00	247	0.40
Maintenance/Monitoring	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Maintenance/Monitoring	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mowing/Clearing/Grubbing	16	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Maintenance/Monitoring	0	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Mowing/Clearing/Grubbing - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	5.1339	50.1614	30.5357	0.0496		2.8814	2.8814		2.6580	2.6580	0.0000	4,852.1448	4,852.1448	1.4715		4,888.9315
Total	5.1339	50.1614	30.5357	0.0496	12.0442	2.8814	14.9255	6.6205	2.6580	9.2785	0.0000	4,852.1448	4,852.1448	1.4715		4,888.9315

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.7900e-003	0.2296	0.0566	5.1000e-004	0.0128	1.5200e-003	0.0143	3.6800e-003	1.4600e-003	5.1400e-003		54.9024	54.9024	3.6900e-003		54.9948
Worker	0.0486	0.0340	0.4479	1.1900e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		118.0362	118.0362	3.7000e-003		118.1286
Total	0.0563	0.2636	0.5045	1.7000e-003	0.1246	2.3900e-003	0.1270	0.0333	2.2700e-003	0.0356		172.9386	172.9386	7.3900e-003		173.1234

3.2 Mowing/Clearing/Grubbing - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000				0.0000
Off-Road	4.8693	47.0262	30.1485	0.0497		2.6852	2.6852		2.4775	2.4775	0.0000	4,755.5186	4,755.5186	1.4722			4,792.3234
Total	4.8693	47.0262	30.1485	0.0497	12.0442	2.6852	14.7294	6.6205	2.4775	9.0979	0.0000	4,755.5186	4,755.5186	1.4722			4,792.3234

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	6.6400e-003	0.2106	0.0512	5.1000e-004	0.0128	1.0400e-003	0.0138	3.6800e-003	1.0000e-003	4.6800e-003		54.5583	54.5583	3.4900e-003			54.6456
Worker	0.0449	0.0303	0.4076	1.1500e-003	0.1118	8.5000e-004	0.1126	0.0296	7.9000e-004	0.0304		114.3836	114.3836	3.3000e-003			114.4660
Total	0.0515	0.2410	0.4588	1.6600e-003	0.1246	1.8900e-003	0.1265	0.0333	1.7900e-003	0.0351		168.9419	168.9419	6.7900e-003			169.1116

3.2 Mowing/Clearing/Grubbing - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000				0.0000
Off-Road	4.6307	44.5763	29.8580	0.0497		2.4970	2.4970		2.3042	2.3042	0.0000	4,756.0029	4,756.0029	1.4724			4,792.8116
Total	4.6307	44.5763	29.8580	0.0497	12.0442	2.4970	14.5411	6.6205	2.3042	8.9247	0.0000	4,756.0029	4,756.0029	1.4724			4,792.8116

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.6300e-003	0.1915	0.0465	5.1000e-004	0.0128	3.9000e-004	0.0132	3.6800e-003	3.7000e-004	4.0600e-003		54.1488	54.1488	3.3500e-003		54.2325
Worker	0.0419	0.0273	0.3755	1.1100e-003	0.1118	8.3000e-004	0.1126	0.0296	7.6000e-004	0.0304		110.6898	110.6898	2.9800e-003		110.7644
Total	0.0475	0.2188	0.4220	1.6200e-003	0.1246	1.2200e-003	0.1258	0.0333	1.1300e-003	0.0345		164.8386	164.8386	6.3300e-003		164.9969

3.3 Maintenance/Monitoring - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.8500e-003	3.4000e-003	0.0448	1.2000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.8036	11.8036	3.7000e-004		11.8129
Total	4.8500e-003	3.4000e-003	0.0448	1.2000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.8036	11.8036	3.7000e-004		11.8129

3.3 Maintenance/Monitoring - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.4900e-003	3.0300e-003	0.0408	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.4384	11.4384	3.3000e-004		11.4466
Total	4.4900e-003	3.0300e-003	0.0408	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.4384	11.4384	3.3000e-004		11.4466

3.3 Maintenance/Monitoring - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.1900e-003	2.7300e-003	0.0376	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.0690	11.0690	3.0000e-004		11.0764
Total	4.1900e-003	2.7300e-003	0.0376	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.0690	11.0690	3.0000e-004		11.0764

3.3 Maintenance/Monitoring - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.9300e-003	2.4700e-003	0.0347	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.6726	10.6726	2.7000e-004		10.6794
Total	3.9300e-003	2.4700e-003	0.0347	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.6726	10.6726	2.7000e-004		10.6794

3.3 Maintenance/Monitoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.6900e-003	2.2300e-003	0.0321	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.2751	10.2751	2.4000e-004		10.2812
Total	3.6900e-003	2.2300e-003	0.0321	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.2751	10.2751	2.4000e-004		10.2812

Arundo Removal - South Coast Air Basin, Winter

Arundo Removal
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	640.00	User Defined Unit	640.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Arundo Removal along Santa Ana River
- Construction Phase - Project-Specific Schedule
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment - Project-Specific Equipment
- Trips and VMT - Project-Specific Daily Maximum. Off-Highway Trucks included as Vendor Trucks
- Demolition -
- Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	420.00	478.00
tblConstructionPhase	NumDays	420.00	1,000.00
tblConstructionPhase	PhaseEndDate	4/9/2021	6/30/2021
tblConstructionPhase	PhaseEndDate	11/18/2022	6/30/2023
tblConstructionPhase	PhaseStartDate	4/10/2021	9/2/2019
tblLandUse	LotAcreage	0.00	640.00
tblOffRoadEquipment	HorsePower	172.00	88.00
tblOffRoadEquipment	LoadFactor	0.42	0.34
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	40.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	1.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.2007	50.4323	31.0461	0.0514	12.1799	2.8839	15.0638	6.6567	2.6604	9.3171	0.0000	5,027.3610	5,027.3610	1.4792	0.0000	5,064.3419
2020	4.9305	47.2734	30.6118	0.0514	12.1799	2.6872	14.8671	6.6567	2.4793	9.1361	0.0000	4,926.6078	4,926.6078	1.4793	0.0000	4,963.5907
2021	4.6873	44.8004	30.2836	0.0513	12.1799	2.4983	14.6782	6.6567	2.3054	8.9622	0.0000	4,922.8743	4,922.8743	1.4790	0.0000	4,959.8492
2022	4.3400e-003	2.7100e-003	0.0314	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	10.0098	10.0098	2.5000e-004	0.0000	10.0161
2023	4.0900e-003	2.4500e-003	0.0289	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	9.6369	9.6369	2.3000e-004	0.0000	9.6426
Maximum	5.2007	50.4323	31.0461	0.0514	12.1799	2.8839	15.0638	6.6567	2.6604	9.3171	0.0000	5,027.3610	5,027.3610	1.4793	0.0000	5,064.3419

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mowing/Clearing/Grubbing	Site Preparation	9/2/2019	6/30/2021	5	478	
2	Maintenance/Monitoring	Site Preparation	9/2/2019	6/30/2023	5	1000	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mowing/Clearing/Grubbing	Dumpers/Tenders	5	8.00	16	0.38
Mowing/Clearing/Grubbing	Excavators	2	8.00	158	0.38
Mowing/Clearing/Grubbing	Off-Highway Trucks	0	8.00	402	0.38
Mowing/Clearing/Grubbing	Other Construction Equipment	6	8.00	88	0.34
Mowing/Clearing/Grubbing	Rubber Tired Dozers	0	8.00	247	0.40
Mowing/Clearing/Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Mowing/Clearing/Grubbing	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Maintenance/Monitoring	Cranes	0	7.00	231	0.29
Maintenance/Monitoring	Forklifts	0	8.00	89	0.20
Maintenance/Monitoring	Generator Sets	0	8.00	84	0.74
Maintenance/Monitoring	Off-Highway Trucks	0	4.00	402	0.38
Maintenance/Monitoring	Rubber Tired Dozers	0	8.00	247	0.40
Maintenance/Monitoring	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Maintenance/Monitoring	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mowing/Clearing/Grubbing	16	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Maintenance/Monitoring	0	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Mowing/Clearing/Grubbing - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	5.1339	50.1614	30.5357	0.0496		2.8814	2.8814		2.6580	2.6580	0.0000	4,852.1448	4,852.1448	1.4715		4,888.9315
Total	5.1339	50.1614	30.5357	0.0496	12.0442	2.8814	14.9255	6.6205	2.6580	9.2785	0.0000	4,852.1448	4,852.1448	1.4715		4,888.9315

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.1300e-003	0.2299	0.0627	5.0000e-004	0.0128	1.5500e-003	0.0143	3.6800e-003	1.4800e-003	5.1600e-003		53.4278	53.4278	3.9500e-003		53.5266
Worker	0.0533	0.0373	0.4070	1.1100e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		110.7167	110.7167	3.4700e-003		110.8035
Total	0.0615	0.2672	0.4697	1.6100e-003	0.1246	2.4200e-003	0.1270	0.0333	2.2900e-003	0.0356		164.1445	164.1445	7.4200e-003		164.3301

3.2 Mowing/Clearing/Grubbing - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	4.8693	47.0262	30.1485	0.0497		2.6852	2.6852		2.4775	2.4775	0.0000	4,755.5186	4,755.5186	1.4722		4,792.3234
Total	4.8693	47.0262	30.1485	0.0497	12.0442	2.6852	14.7294	6.6205	2.4775	9.0979	0.0000	4,755.5186	4,755.5186	1.4722		4,792.3234

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	6.9400e-003	0.2106	0.0568	5.0000e-004	0.0128	1.0600e-003	0.0139	3.6800e-003	1.0100e-003	4.7000e-003		53.0755	53.0755	3.7300e-003			53.1688
Worker	0.0493	0.0333	0.3696	1.0800e-003	0.1118	8.5000e-004	0.1126	0.0296	7.9000e-004	0.0304		107.2851	107.2851	3.0900e-003			107.3623
Total	0.0563	0.2439	0.4264	1.5800e-003	0.1246	1.9100e-003	0.1265	0.0333	1.8000e-003	0.0351		160.3606	160.3606	6.8200e-003			160.5311

3.2 Mowing/Clearing/Grubbing - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000				0.0000
Off-Road	4.6307	44.5763	29.8580	0.0497		2.4970	2.4970		2.3042	2.3042	0.0000	4,756.0029	4,756.0029	1.4724			4,792.8116
Total	4.6307	44.5763	29.8580	0.0497	12.0442	2.4970	14.5411	6.6205	2.3042	8.9247	0.0000	4,756.0029	4,756.0029	1.4724			4,792.8116

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	5.9100e-003	0.1911	0.0517	4.9000e-004	0.0128	4.0000e-004	0.0132	3.6800e-003	3.9000e-004	4.0700e-003		52.6748	52.6748	3.5800e-003			52.7642
Worker	0.0461	0.0300	0.3399	1.0400e-003	0.1118	8.3000e-004	0.1126	0.0296	7.6000e-004	0.0304		103.8151	103.8151	2.7900e-003			103.8849
Total	0.0520	0.2211	0.3916	1.5300e-003	0.1246	1.2300e-003	0.1258	0.0333	1.1500e-003	0.0345		156.4899	156.4899	6.3700e-003			156.6491

3.3 Maintenance/Monitoring - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.3300e-003	3.7300e-003	0.0407	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.0717	11.0717	3.5000e-004		11.0804
Total	5.3300e-003	3.7300e-003	0.0407	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.0717	11.0717	3.5000e-004		11.0804

3.3 Maintenance/Monitoring - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.9300e-003	3.3300e-003	0.0370	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.7285	10.7285	3.1000e-004		10.7362
Total	4.9300e-003	3.3300e-003	0.0370	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.7285	10.7285	3.1000e-004		10.7362

3.3 Maintenance/Monitoring - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.6100e-003	3.0000e-003	0.0340	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.3815	10.3815	2.8000e-004		10.3885
Total	4.6100e-003	3.0000e-003	0.0340	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.3815	10.3815	2.8000e-004		10.3885

3.3 Maintenance/Monitoring - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.3400e-003	2.7100e-003	0.0314	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.0098	10.0098	2.5000e-004		10.0161
Total	4.3400e-003	2.7100e-003	0.0314	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.0098	10.0098	2.5000e-004		10.0161

3.3 Maintenance/Monitoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.0900e-003	2.4500e-003	0.0289	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		9.6369	9.6369	2.3000e-004		9.6426
Total	4.0900e-003	2.4500e-003	0.0289	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		9.6369	9.6369	2.3000e-004		9.6426

Cannon Pump Station

SARCCUP
Canyon Pump Station
Unmitigated

Maximum Day

Phase	On-Site						Off-Site						Maximum Total					
	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Decommissioning (2020)	0.6909	7.067	7.3399	0.0109	0.3955	0.3637	0.1618	1.2497	1.3025	0.0057	0.3596	0.1024	0.8527	8.3167	8.6424	0.0166	0.7551	0.4661
Decommissioning (2021)	0.6247	6.3274	7.3025	0.0109	0.343	0.3154	0.148	1.1336	1.1962	0.0058	0.3555	0.0988	0.7727	7.461	8.4987	0.01648	0.6985	0.4142
Decommissioning (2022)	0.5465	5.4303	7.2427	0.0109	0.2827	0.2599	0.1392	1.0724	1.1119	0.00546	0.3552	0.0985	0.6857	6.5027	8.3546	0.01636	0.6379	0.3584
Decommissioning (2023)	0.5056	4.9159	7.2285	0.0109	0.2473	0.2273	0.1251	0.8161	1.0217	0.00527	0.3554	0.0977	0.6307	5.732	8.2502	0.01617	0.6027	0.325
Excavation and Shoring (2020)	1.7061	17.0895	16.1332	0.0274	0.9761	0.831	0.0104	0.316	0.0852	0.00077	0.0208	0.00705	1.7165	17.4055	16.2184	0.02817	0.9969	0.83805
Excavation and Shoring (2021)	1.5645	15.4147	15.9603	0.0274	0.8644	0.7267	0.00887	0.2873	0.0776	0.00076	0.0198	0.0061	1.57337	15.702	16.0379	0.02816	0.8842	0.7328
Excavation and Shoring (2022)	1.4056	13.3789	15.7849	0.0274	0.7436	0.6143	0.00832	0.2729	0.0735	0.00075	0.0197	0.00603	1.41392	13.6518	15.8584	0.02815	0.7633	0.62033
Excavation and Shoring (2023)	1.3119	12.1108	15.7135	0.0274	0.664	0.5397	0.00618	0.2057	0.0651	0.00073	0.0194	0.00576	1.31808	12.3165	15.7786	0.02813	0.6834	0.54546
Building Construction (2020)	0.9656	9.3471	8.0175	0.0139	0.4601	0.4268	0.0104	0.316	0.0852	0.00077	0.0208	0.00705	0.976	9.6631	8.1027	0.01467	0.4809	0.43385
Building Construction (2021)	0.8775	8.4407	7.8786	0.0139	0.4009	0.3718	0.00887	0.2873	0.0776	0.00076	0.0198	0.0061	0.88637	8.728	7.9562	0.01466	0.4207	0.3779
Building Construction (2022)	0.7852	7.3223	7.7603	0.0139	0.3383	0.3138	0.00832	0.2729	0.0735	0.00075	0.0197	0.00603	0.79352	7.5952	7.8338	0.01465	0.358	0.31983
Building Construction (2023)	0.7308	6.6562	7.7039	0.0139	0.2987	0.277	0.00618	0.2057	0.0651	0.00073	0.0194	0.00576	0.73698	6.8619	7.769	0.01463	0.3181	0.28276
Pipeline Installation (2020)	1.1809	11.3676	8.3407	0.0152	0.5647	0.5347	0.0104	0.316	0.0852	0.00077	0.0208	0.00705	1.1913	11.6836	8.4259	0.01597	0.5855	0.54175
Pipeline Installation (2021)	1.044	10.0518	8.1514	0.0152	0.4823	0.4568	0.00887	0.2873	0.0776	0.00076	0.0198	0.0061	1.05287	10.3391	8.229	0.01596	0.5021	0.4629
Pipeline Installation (2022)	0.9476	8.9272	8.0393	0.0152	0.4217	0.3994	0.00832	0.2729	0.0735	0.00075	0.0197	0.00603	0.95592	9.2001	8.1128	0.01595	0.4414	0.40543
Pipeline Installation (2023)	0.8815	8.1869	7.9688	0.0152	0.3775	0.3572	0.00618	0.2057	0.0651	0.00073	0.0194	0.00576	0.88768	8.3926	8.0339	0.01593	0.3969	0.36296
Street Restoration (2023)	0.1728	1.7465	2.3677	0.00366	0.0886	0.0815	0	0	0	0	0	0	0.1728	1.7465	2.3677	0.00366	0.0886	0.0815

Localized Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2020)	4.5435	44.8712	39.8313	0.0674	2.3964	2.1562
All Phases (2021)	4.1107	40.2346	39.2928	0.0674	2.0906	1.8707
All Phases (2022)	3.6849	35.0587	38.8272	0.0674	1.7863	1.5874
All Phases (2023)	3.6026	33.6163	40.9824	0.07106	1.6761	1.4827
Maximum	4.5435	44.8712	40.9824	0.07106	2.3964	2.1562
SCAQMD LST Threshold (SRA 23)	N/A	170	883	N/A	7	4
2 Acres at 25 Meters	N/A	No	No	N/A	No	No

Regional Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2020)	4.7365	47.0689	41.3894	0.07541	2.8184	2.27975
All Phases (2021)	4.28531	42.2301	40.7218	0.07526	2.5055	1.9878
All Phases (2022)	3.84906	36.9498	40.1596	0.07511	2.2006	1.70399
All Phases (2023)	3.74624	35.0495	42.1994	0.07852	2.0897	1.59768
Maximum	4.7365	47.0689	42.1994	0.07852	2.8184	2.27975
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

SARCCUP: Canyon Pump Station - South Coast Air Basin, Summer

SARCCUP: Cannon Pump Station
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	5,000.00	User Defined Unit	2.90	5,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Assume approximately 5,000 SF Pump Station

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading - Assume 0.25 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	848.00
tblConstructionPhase	NumDays	20.00	848.00
tblConstructionPhase	NumDays	6.00	848.00
tblConstructionPhase	NumDays	10.00	45.00
tblGrading	AcresOfGrading	0.00	200.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	5,000.00
tblLandUse	LotAcreage	0.00	2.90
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	HaulingTripNumber	2.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	11.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	1.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	25.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.7222	47.0616	41.3644	0.0753	0.5073	2.3109	2.8182	0.1220	2.1576	2.2796	0.0000	7,283.0728	7,283.0728	1.8466	0.0000	7,329.2368
2021	4.2718	42.2257	40.6983	0.0752	0.5069	1.9985	2.5055	0.1219	1.8658	1.9877	0.0000	7,269.9987	7,269.9987	1.8360	0.0000	7,315.8978
2022	3.8361	36.9466	40.1372	0.0750	0.5069	1.6936	2.2006	0.1219	1.5818	1.7037	0.0000	7,256.1925	7,256.1925	1.8290	0.0000	7,301.9170
2023	3.7342	35.0481	42.1829	0.0785	0.5082	1.5814	2.0896	0.1222	1.4754	1.5976	0.0000	7,585.7011	7,585.7011	1.9336	0.0000	7,634.0407
Maximum	4.7222	47.0616	42.1829	0.0785	0.5082	2.3109	2.8182	0.1222	2.1576	2.2796	0.0000	7,585.7011	7,585.7011	1.9336	0.0000	7,634.0407

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Decomissioning	Demolition	4/1/2020	6/30/2023	5	848	
2	Excavation and Shoring	Grading	4/1/2020	6/30/2023	5	848	
3	Pipeline Installation	Trenching	4/1/2020	6/30/2023	5	848	
4	Building Construction	Building Construction	4/1/2020	6/30/2023	5	848	
5	Street Restoration	Paving	5/1/2023	6/30/2023	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Decomissioning	Concrete/Industrial Saws	0	8.00	81	0.73
Decomissioning	Excavators	1	4.00	158	0.38
Decomissioning	Graders	0	8.00	187	0.41
Decomissioning	Off-Highway Trucks	0	6.00	402	0.38
Decomissioning	Other Construction Equipment	1	2.00	172	0.42
Decomissioning	Pavers	1	4.00	130	0.42
Decomissioning	Rollers	1	4.00	80	0.38
Decomissioning	Rubber Tired Dozers	0	8.00	247	0.40
Decomissioning	Scrapers	0	8.00	367	0.48
Decomissioning	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38

Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	7.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Off-Highway Trucks	0	6.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Decommissioning	6	25.00	11.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Decommissioning - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000				0.0000
Off-Road	0.6909	7.0670	7.3399	0.0109		0.3953	0.3953		0.3637	0.3637	0.0000	1,055.1980	1,055.1980	0.3413			1,063.7298
Total	0.6909	7.0670	7.3399	0.0109	2.3000e-004	0.3953	0.3955	3.0000e-005	0.3637	0.3637	0.0000	1,055.1980	1,055.1980	0.3413			1,063.7298

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	2.3000e-004	8.2100e-003	1.7100e-003	2.0000e-005	1.8000e-003	3.0000e-005	1.8300e-003	4.6000e-004	3.0000e-005	4.8000e-004		2.4835	2.4835	1.8000e-004			2.4879
Vendor	0.0365	1.1585	0.2818	2.8100e-003	0.0704	5.7400e-003	0.0761	0.0203	5.4900e-003	0.0258		300.0704	300.0704	0.0192			300.5506
Worker	0.1121	0.0758	1.0190	2.8700e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		285.9591	285.9591	8.2400e-003			286.1651
Total	0.1489	1.2426	1.3025	5.7000e-003	0.3516	7.9000e-003	0.3595	0.0948	7.4800e-003	0.1023		588.5130	588.5130	0.0276			589.2036

3.2 Decommissioning - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000				0.0000
Off-Road	0.6247	6.3274	7.3025	0.0109		0.3428	0.3428		0.3154	0.3154	0.0000	1,055.2020	1,055.2020	0.3413			1,063.7339
Total	0.6247	6.3274	7.3025	0.0109	2.3000e-004	0.3428	0.3430	3.0000e-005	0.3154	0.3154	0.0000	1,055.2020	1,055.2020	0.3413			1,063.7339

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2000e-004	7.6400e-003	1.6900e-003	2.0000e-005	1.3900e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4566	2.4566	1.7000e-004		2.4609
Vendor	0.0310	1.0534	0.2558	2.7800e-003	0.0704	2.1500e-003	0.0725	0.0203	2.0600e-003	0.0223		297.8181	297.8181	0.0184		298.2785
Worker	0.1046	0.0682	0.9387	2.7800e-003	0.2794	2.0700e-003	0.2815	0.0741	1.9000e-003	0.0760		276.7246	276.7246	7.4600e-003		276.9110
Total	0.1358	1.1293	1.1962	5.5800e-003	0.3512	4.2400e-003	0.3555	0.0947	3.9800e-003	0.0987		576.9993	576.9993	0.0261		577.6504

3.2 Decommissioning - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.5465	5.4303	7.2427	0.0109		0.2824	0.2824		0.2598	0.2598	0.0000	1,055.5103	1,055.5103	0.3414		1,064.0446
Total	0.5465	5.4303	7.2427	0.0109	2.3000e-004	0.2824	0.2827	3.0000e-005	0.2598	0.2599	0.0000	1,055.5103	1,055.5103	0.3414		1,064.0446

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1000e-004	7.0800e-003	1.6700e-003	2.0000e-005	1.4000e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4273	2.4273	1.7000e-004		2.4316
Vendor	0.0290	1.0006	0.2422	2.7600e-003	0.0704	1.8700e-003	0.0723	0.0203	1.7900e-003	0.0221		295.2073	295.2073	0.0178		295.6518
Worker	0.0982	0.0617	0.8680	2.6800e-003	0.2794	2.0100e-003	0.2815	0.0741	1.8500e-003	0.0760		266.8158	266.8158	6.7400e-003		266.9844
Total	0.1274	1.0693	1.1119	5.4600e-003	0.3512	3.9000e-003	0.3551	0.0947	3.6600e-003	0.0984		564.4503	564.4503	0.0247		565.0677

3.2 Decommissioning - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.5056	4.9159	7.2285	0.0109		0.2470	0.2470		0.2273	0.2273	0.0000	1,055.8572	1,055.8572	0.3415		1,064.3944
Total	0.5056	4.9159	7.2285	0.0109	2.3000e-004	0.2470	0.2473	3.0000e-005	0.2273	0.2273	0.0000	1,055.8572	1,055.8572	0.3415		1,064.3944

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.5600e-003	1.5200e-003	2.0000e-005	2.6700e-003	1.0000e-005	2.6800e-003	6.7000e-004	1.0000e-005	6.8000e-004		2.3277	2.3277	1.6000e-004		2.3317
Vendor	0.0215	0.7543	0.2186	2.6700e-003	0.0704	8.6000e-004	0.0713	0.0203	8.3000e-004	0.0211		286.0401	286.0401	0.0157		286.4331
Worker	0.0923	0.0558	0.8016	2.5800e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8000e-003	0.0759		256.8775	256.8775	6.0800e-003		257.0295
Total	0.1140	0.8147	1.0217	5.2700e-003	0.3525	2.8300e-003	0.3553	0.0950	2.6400e-003	0.0977		545.2453	545.2453	0.0220		545.7944

3.3 Excavation and Shoring - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	1.7061	17.0895	16.1332	0.0274		0.8782	0.8782		0.8204	0.8204	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618
Total	1.7061	17.0895	16.1332	0.0274	0.0979	0.8782	0.9761	0.0106	0.8204	0.8310	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003			81.9684
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003			81.9684

3.3 Excavation and Shoring - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000				0.0000
Off-Road	1.5645	15.4147	15.9603	0.0274		0.7665	0.7665		0.7161	0.7161	0.0000	2,631.2809	2,631.2809	0.7274			2,649.4654
Total	1.5645	15.4147	15.9603	0.0274	0.0979	0.7665	0.8644	0.0106	0.7161	0.7267	0.0000	2,631.2809	2,631.2809	0.7274			2,649.4654

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003			81.3487
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003			81.3487

3.3 Excavation and Shoring - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	1.4056	13.3789	15.7849	0.0274		0.6458	0.6458		0.6037	0.6037	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456
Total	1.4056	13.3789	15.7849	0.0274	0.0979	0.6458	0.7436	0.0106	0.6037	0.6143	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003		80.6323
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003		80.6323

3.3 Excavation and Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	1.3119	12.1108	15.7135	0.0274		0.5661	0.5661		0.5291	0.5291	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393
Total	1.3119	12.1108	15.7135	0.0274	0.0979	0.5661	0.6640	0.0106	0.5291	0.5397	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003			78.1181
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003			78.1181

3.4 Pipeline Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.1809	11.3676	8.3407	0.0152		0.5647	0.5647		0.5347	0.5347	0.0000	1,439.2101	1,439.2101	0.3224			1,447.2710
Total	1.1809	11.3676	8.3407	0.0152		0.5647	0.5647		0.5347	0.5347	0.0000	1,439.2101	1,439.2101	0.3224			1,447.2710

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003			81.9684
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003			81.9684

3.4 Pipeline Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0440	10.0518	8.1514	0.0152		0.4823	0.4823		0.4568	0.4568	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138
Total	1.0440	10.0518	8.1514	0.0152		0.4823	0.4823		0.4568	0.4568	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003		81.3487
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003		81.3487

3.4 Pipeline Installation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9476	8.9272	8.0393	0.0152		0.4217	0.4217		0.3994	0.3994	0.0000	1,438.8860	1,438.8860	0.3153		1,446.785
Total	0.9476	8.9272	8.0393	0.0152		0.4217	0.4217		0.3994	0.3994	0.0000	1,438.8860	1,438.8860	0.3153		1,446.785

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003		80.6323
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003		80.6323

3.4 Pipeline Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8815	8.1869	7.9688	0.0152		0.3775	0.3775		0.3572	0.3572	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390
Total	0.8815	8.1869	7.9688	0.0152		0.3775	0.3775		0.3572	0.3572	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9656	9.3471	8.0175	0.0139		0.4601	0.4601		0.4268	0.4268	0.0000	1,323.7180	1,323.7180	0.4099		1,333.9655
Total	0.9656	9.3471	8.0175	0.0139		0.4601	0.4601		0.4268	0.4268	0.0000	1,323.7180	1,323.7180	0.4099		1,333.9655

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003		81.9684
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003		81.9684

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8775	8.4407	7.8786	0.0139		0.4009	0.4009		0.3718	0.3718	0.0000	1,323.8850	1,323.8850	0.4081		1,334.0882
Total	0.8775	8.4407	7.8786	0.0139		0.4009	0.4009		0.3718	0.3718	0.0000	1,323.8850	1,323.8850	0.4081		1,334.0882

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003			81.3487
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003			81.3487

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.7852	7.3223	7.7603	0.0139		0.3383	0.3383		0.3138	0.3138	0.0000	1,324.1159	1,324.1159	0.4071			1,334.2935
Total	0.7852	7.3223	7.7603	0.0139		0.3383	0.3383		0.3138	0.3138	0.0000	1,324.1159	1,324.1159	0.4071			1,334.2935

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003			80.6323
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003			80.6323

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7308	6.6562	7.7039	0.0139		0.2987	0.2987		0.2770	0.2770	0.0000	1,324.5354	1,324.5354	0.4062		1,334.6891
Total	0.7308	6.6562	7.7039	0.0139		0.2987	0.2987		0.2770	0.2770	0.0000	1,324.5354	1,324.5354	0.4062		1,334.6891

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181

3.6 Street Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1728	1.7465	2.3677	3.6600e-003		0.0886	0.0886		0.0815	0.0815	0.0000	354.6625	354.6625	0.1147		357.5301
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1728	1.7465	2.3677	3.6600e-003		0.0886	0.0886		0.0815	0.0815	0.0000	354.6625	354.6625	0.1147		357.5301

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

SARCCUP: Canyon Pump Station - South Coast Air Basin, Winter

SARCCUP: Canyon Pump Station
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	5,000.00	User Defined Unit	2.90	5,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Assume approximately 5,000 SF Pump Station

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading - Assume 0.25 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	848.00
tblConstructionPhase	NumDays	20.00	848.00
tblConstructionPhase	NumDays	6.00	848.00
tblConstructionPhase	NumDays	10.00	45.00
tblGrading	AcresOfGrading	0.00	200.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	5,000.00
tblLandUse	LotAcreage	0.00	2.90
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	HaulingTripNumber	2.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	11.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	1.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	25.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.7365	47.0684	41.3249	0.0750	0.5073	2.3110	2.8183	0.1220	2.1577	2.2798	0.0000	7,250.4563	7,250.4563	1.8485	0.0000	7,296.6674
2021	4.2853	42.2280	40.6614	0.0749	0.5069	1.9987	2.5056	0.1219	1.8659	1.9878	0.0000	7,238.0298	7,238.0298	1.8378	0.0000	7,283.9747
2022	3.8491	36.9471	40.1029	0.0747	0.5069	1.6937	2.2007	0.1219	1.5819	1.7038	0.0000	7,224.8831	7,224.8831	1.8307	0.0000	7,270.6517
2023	3.7463	35.0462	42.1411	0.0782	0.5082	1.5815	2.0897	0.1222	1.4754	1.5977	0.0000	7,555.6940	7,555.6940	1.9349	0.0000	7,604.0671
Maximum	4.7365	47.0684	42.1411	0.0782	0.5082	2.3110	2.8183	0.1222	2.1577	2.2798	0.0000	7,555.6940	7,555.6940	1.9349	0.0000	7,604.0671

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Decomissioning	Demolition	4/1/2020	6/30/2023	5	848	
2	Excavation and Shoring	Grading	4/1/2020	6/30/2023	5	848	
3	Pipeline Installation	Trenching	4/1/2020	6/30/2023	5	848	
4	Building Construction	Building Construction	4/1/2020	6/30/2023	5	848	
5	Street Restoration	Paving	5/1/2023	6/30/2023	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Decomissioning	Concrete/Industrial Saws	0	8.00	81	0.73
Decomissioning	Excavators	1	4.00	158	0.38
Decomissioning	Graders	0	8.00	187	0.41
Decomissioning	Off-Highway Trucks	0	6.00	402	0.38
Decomissioning	Other Construction Equipment	1	2.00	172	0.42
Decomissioning	Pavers	1	4.00	130	0.42
Decomissioning	Rollers	1	4.00	80	0.38
Decomissioning	Rubber Tired Dozers	0	8.00	247	0.40
Decomissioning	Scrapers	0	8.00	367	0.48
Decomissioning	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38

Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	7.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Off-Highway Trucks	0	6.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Decomissioning	6	25.00	11.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Decommissioning - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000				0.0000
Off-Road	0.6909	7.0670	7.3399	0.0109		0.3953	0.3953		0.3637	0.3637	0.0000	1,055.1980	1,055.1980	0.3413			1,063.7298
Total	0.6909	7.0670	7.3399	0.0109	2.3000e-004	0.3953	0.3955	3.0000e-005	0.3637	0.3637	0.0000	1,055.1980	1,055.1980	0.3413			1,063.7298

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	2.4000e-004	8.3200e-003	1.8200e-003	2.0000e-005	1.8000e-003	3.0000e-005	1.8300e-003	4.6000e-004	3.0000e-005	4.8000e-004		2.4411	2.4411	1.8000e-004			2.4456
Vendor	0.0382	1.1581	0.3123	2.7300e-003	0.0704	5.8200e-003	0.0762	0.0203	5.5700e-003	0.0258		291.9151	291.9151	0.0205			292.4283
Worker	0.1234	0.0833	0.9240	2.6900e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		268.2128	268.2128	7.7200e-003			268.4058
Total	0.1618	1.2497	1.2381	5.4400e-003	0.3516	7.9800e-003	0.3596	0.0948	7.5600e-003	0.1024		562.5690	562.5690	0.0284			563.2798

3.2 Decommissioning - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000				0.0000
Off-Road	0.6247	6.3274	7.3025	0.0109		0.3428	0.3428		0.3154	0.3154	0.0000	1,055.2020	1,055.2020	0.3413			1,063.7339
Total	0.6247	6.3274	7.3025	0.0109	2.3000e-004	0.3428	0.3430	3.0000e-005	0.3154	0.3154	0.0000	1,055.2020	1,055.2020	0.3413			1,063.7339

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.3000e-004	7.7400e-003	1.8000e-003	2.0000e-005	1.3900e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4144	2.4144	1.8000e-004		2.4189
Vendor	0.0325	1.0510	0.2843	2.7100e-003	0.0704	2.2200e-003	0.0726	0.0203	2.1200e-003	0.0224		289.7112	289.7112	0.0197		290.2032
Worker	0.1153	0.0749	0.8497	2.6000e-003	0.2794	2.0700e-003	0.2815	0.0741	1.9000e-003	0.0760		259.5378	259.5378	6.9800e-003		259.7123
Total	0.1480	1.1336	1.1358	5.3300e-003	0.3512	4.3100e-003	0.3555	0.0947	4.0400e-003	0.0988		551.6633	551.6633	0.0268		552.3344

3.2 Decommissioning - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.5465	5.4303	7.2427	0.0109		0.2824	0.2824		0.2598	0.2598	0.0000	1,055.5103	1,055.5103	0.3414		1,064.0446
Total	0.5465	5.4303	7.2427	0.0109	2.3000e-004	0.2824	0.2827	3.0000e-005	0.2598	0.2599	0.0000	1,055.5103	1,055.5103	0.3414		1,064.0446

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2000e-004	7.1600e-003	1.7800e-003	2.0000e-005	1.4000e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.3853	2.3853	1.8000e-004		2.3897
Vendor	0.0305	0.9975	0.2693	2.6800e-003	0.0704	1.9300e-003	0.0723	0.0203	1.8500e-003	0.0221		287.1243	287.1243	0.0190		287.5991
Worker	0.1084	0.0677	0.7844	2.5100e-003	0.2794	2.0100e-003	0.2815	0.0741	1.8500e-003	0.0760		250.2447	250.2447	6.3000e-003		250.4023
Total	0.1392	1.0724	1.0554	5.2100e-003	0.3512	3.9600e-003	0.3552	0.0947	3.7200e-003	0.0985		539.7543	539.7543	0.0255		540.3911

3.2 Decommissioning - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.5056	4.9159	7.2285	0.0109		0.2470	0.2470		0.2273	0.2273	0.0000	1,055.8572	1,055.8572	0.3415		1,064.3944
Total	0.5056	4.9159	7.2285	0.0109	2.3000e-004	0.2470	0.2473	3.0000e-005	0.2273	0.2273	0.0000	1,055.8572	1,055.8572	0.3415		1,064.3944

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.5900e-003	1.5900e-003	2.0000e-005	2.6700e-003	1.0000e-005	2.6800e-003	6.7000e-004	1.0000e-005	6.8000e-004		2.2877	2.2877	1.6000e-004		2.2918
Vendor	0.0227	0.7503	0.2388	2.6000e-003	0.0704	9.1000e-004	0.0713	0.0203	8.7000e-004	0.0211		278.3331	278.3331	0.0167		278.7500
Worker	0.1023	0.0612	0.7229	2.4200e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8000e-003	0.0759		240.9232	240.9232	5.6800e-003		241.0652
Total	0.1251	0.8161	0.9634	5.0400e-003	0.3525	2.8800e-003	0.3554	0.0950	2.6800e-003	0.0977		521.5440	521.5440	0.0225		522.1070

3.3 Excavation and Shoring - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	1.7061	17.0895	16.1332	0.0274		0.8782	0.8782		0.8204	0.8204	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618
Total	1.7061	17.0895	16.1332	0.0274	0.0979	0.8782	0.9761	0.0106	0.8204	0.8310	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003			79.7532
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003			79.7532

3.3 Excavation and Shoring - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000	
Off-Road	1.5645	15.4147	15.9603	0.0274		0.7665	0.7665		0.7161	0.7161	0.0000	2,631.2809	2,631.2809	0.7274			2,649.4654
Total	1.5645	15.4147	15.9603	0.0274	0.0979	0.7665	0.8644	0.0106	0.7161	0.7267	0.0000	2,631.2809	2,631.2809	0.7274			2,649.4654

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003			79.1463
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003			79.1463

3.3 Excavation and Shoring - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	1.4056	13.3789	15.7849	0.0274		0.6458	0.6458		0.6037	0.6037	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456
Total	1.4056	13.3789	15.7849	0.0274	0.0979	0.6458	0.7436	0.0106	0.6037	0.6143	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361

3.3 Excavation and Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	1.3119	12.1108	15.7135	0.0274		0.5661	0.5661		0.5291	0.5291	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393
Total	1.3119	12.1108	15.7135	0.0274	0.0979	0.5661	0.6640	0.0106	0.5291	0.5397	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003			76.0227
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003			76.0227

3.4 Pipeline Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.1809	11.3676	8.3407	0.0152		0.5647	0.5647		0.5347	0.5347	0.0000	1,439.2101	1,439.2101	0.3224			1,447.2710
Total	1.1809	11.3676	8.3407	0.0152		0.5647	0.5647		0.5347	0.5347	0.0000	1,439.2101	1,439.2101	0.3224			1,447.2710

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003			79.7532
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003			79.7532

3.4 Pipeline Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0440	10.0518	8.1514	0.0152		0.4823	0.4823		0.4568	0.4568	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138
Total	1.0440	10.0518	8.1514	0.0152		0.4823	0.4823		0.4568	0.4568	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003		79.1463
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003		79.1463

3.4 Pipeline Installation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9476	8.9272	8.0393	0.0152		0.4217	0.4217		0.3994	0.3994	0.0000	1,438.8860	1,438.8860	0.3153		1,446.785
Total	0.9476	8.9272	8.0393	0.0152		0.4217	0.4217		0.3994	0.3994	0.0000	1,438.8860	1,438.8860	0.3153		1,446.785

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003			78.4361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003			78.4361

3.4 Pipeline Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.8815	8.1869	7.9688	0.0152		0.3775	0.3775		0.3572	0.3572	0.0000	1,438.8255	1,438.8255	0.3125			1,446.6390
Total	0.8815	8.1869	7.9688	0.0152		0.3775	0.3775		0.3572	0.3572	0.0000	1,438.8255	1,438.8255	0.3125			1,446.6390

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003			76.0227
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003			76.0227

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9656	9.3471	8.0175	0.0139		0.4601	0.4601		0.4268	0.4268	0.0000	1,323.7180	1,323.7180	0.4099		1,333.9655
Total	0.9656	9.3471	8.0175	0.0139		0.4601	0.4601		0.4268	0.4268	0.0000	1,323.7180	1,323.7180	0.4099		1,333.9655

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003		79.7532
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003		79.7532

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8775	8.4407	7.8786	0.0139		0.4009	0.4009		0.3718	0.3718	0.0000	1,323.8850	1,323.8850	0.4081		1,334.0882
Total	0.8775	8.4407	7.8786	0.0139		0.4009	0.4009		0.3718	0.3718	0.0000	1,323.8850	1,323.8850	0.4081		1,334.0882

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003			79.1463
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003			79.1463

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.7852	7.3223	7.7603	0.0139		0.3383	0.3383		0.3138	0.3138	0.0000	1,324.1159	1,324.1159	0.4071			1,334.2935
Total	0.7852	7.3223	7.7603	0.0139		0.3383	0.3383		0.3138	0.3138	0.0000	1,324.1159	1,324.1159	0.4071			1,334.2935

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003			78.4361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003			78.4361

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7308	6.6562	7.7039	0.0139		0.2987	0.2987		0.2770	0.2770	0.0000	1,324.5354	1,324.5354	0.4062		1,334.6891
Total	0.7308	6.6562	7.7039	0.0139		0.2987	0.2987		0.2770	0.2770	0.0000	1,324.5354	1,324.5354	0.4062		1,334.6891

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003		76.0227
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003		76.0227

3.6 Street Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1728	1.7465	2.3677	3.6600e-003		0.0886	0.0886		0.0815	0.0815	0.0000	354.6625	354.6625	0.1147		357.5301
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1728	1.7465	2.3677	3.6600e-003		0.0886	0.0886		0.0815	0.0815	0.0000	354.6625	354.6625	0.1147		357.5301

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

ID-4 CRA Crossing Refurbishment

SARCCUP
 ID-4 CRA Crossing Refurbishment
 Unmitigated

Maximum Day

Phase	On-Site						Off-Site						Maximum Total					
	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Grading (2019)	1.1622	11.4939	7.802	0.0133	1.0302	0.6159	0.1748	1.2717	1.4086	0.00561	0.3556	0.1026	1.337	12.7656	9.2106	0.01891	1.3858	0.7185
Grading (2020)	1.0434	10.3875	7.5583	0.0133	0.9456	0.5375	0.1589	1.1632	1.2807	0.00549	0.3566	0.1011	1.2023	11.5507	8.839	0.01879	1.3022	0.6386

Localized Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
Grading (2019)	1.1622	11.4939	7.802	0.0133	1.0302	0.6159
Grading (2020)	1.0434	10.3875	7.5583	0.0133	0.9456	0.5375
Maximum	1.1622	11.4939	7.802	0.0133	1.0302	0.6159
SCAQMD LST Threshold (SRA 22)						
5 Acres at 500 Meters	N/A	778	22490	N/A	228	113
Exceeds Threshold?	N/A	No	No	N/A	No	No

Regional Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
Grading (2019)	1.337	12.7656	9.2106	0.01891	1.3858	0.7185
Grading (2020)	1.2023	11.5507	8.839	0.01879	1.3022	0.6386
Maximum	1.337	12.7656	9.2106	0.01891	1.3858	0.7185
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

SARCCUP: ID-4 CRA Crossing Refurbishment - South Coast Air Basin, Summer

SARCCUP: ID-4 CRA Crossing Refurbishment
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	39.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Grading and Excavation Only
- Construction Phase - Grading and Excavation Only
- Off-road Equipment -
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment -
- Trips and VMT - Project-Specific Assumptions
- Grading - Assume equivalent of 1 acre graded per day by a backhoe.
- Architectural Coating - Grading and Excavation Only
- Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,500.00	0.00
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	740.00	0.00
tblConstructionPhase	NumDays	50.00	0.00
tblConstructionPhase	NumDays	75.00	260.00
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	30.00	0.00
tblGrading	AcresOfGrading	0.00	260.00
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	39.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	10.00	25.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.3234	12.7554	9.2106	0.0189	0.7591	5.4780	1.3856	0.1378	5.0842	0.7184	0.0000	1,867.8174	1,867.8174	0.4210	0.0000	1,878.3419
2020	1.1896	11.5433	8.8390	0.0188	0.7627	0.5394	1.3021	0.1386	0.4999	0.6385	0.0000	1,830.9159	1,830.9159	0.4169	0.0000	1,841.3379
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.6508	0.0000	0.0000	0.6053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	1.3234	12.7554	9.2106	0.0189	0.7627	5.4780	1.3856	0.1386	5.0842	0.7184	0.0000	1,867.8174	1,867.8174	0.4210	0.0000	1,878.3419

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	3/31/2019	5	0	
2	Grading	Grading	4/1/2019	3/27/2020	5	260	
3	Site Preparation	Site Preparation	6/8/2019	6/7/2019	5	0	
4	Building Construction	Building Construction	11/2/2019	11/1/2019	5	0	
5	Paving	Paving	9/3/2022	9/2/2022	5	0	
6	Architectural Coating	Architectural Coating	11/19/2022	11/18/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 260

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Cranes	1	8.00	231	0.29
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Welders	1	4.00	46	0.45

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	1.1622	11.4939	7.8020	0.0133		0.6166	0.6166		0.5712	0.5712	0.0000	1,290.0332	1,290.0332	0.3927		1,299.8500
Total	1.1622	11.4939	7.8020	0.0133	0.4136	0.6166	1.0302	0.0447	0.5712	0.6159	0.0000	1,290.0332	1,290.0332	0.3927		1,299.8500

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.3000e-004	0.0286	5.7300e-003	8.0000e-005	2.0900e-003	1.1000e-004	2.1900e-003	5.6000e-004	1.0000e-004	6.6000e-004		8.1817	8.1817	5.9000e-004		8.1964
Vendor	0.0390	1.1479	0.2831	2.5700e-003	0.0640	7.6100e-003	0.0716	0.0184	7.2800e-003	0.0257		274.5122	274.5122	0.0185		274.9739
Worker	0.1214	0.0849	1.1198	2.9600e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		295.0904	295.0904	9.2500e-003		295.3216
Total	0.1612	1.2615	1.4086	5.6100e-003	0.3455	9.9100e-003	0.3554	0.0931	9.4000e-003	0.1025		577.7843	577.7843	0.0283		578.4919

SARCCUP: ID-4 CRA Crossing Refurbishment - South Coast Air Basin, Winter

SARCCUP: ID-4 CRA Crossing Refurbishment
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	39.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Grading and Excavation Only
- Construction Phase - Grading and Excavation Only
- Off-road Equipment -
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment -
- Trips and VMT - Project-Specific Assumptions
- Grading - Assume equivalent of 1 acre graded per day by a backhoe.
- Architectural Coating - Grading and Excavation Only
- Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,500.00	0.00
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	740.00	0.00
tblConstructionPhase	NumDays	50.00	0.00
tblConstructionPhase	NumDays	75.00	260.00
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	30.00	0.00
tblGrading	AcresOfGrading	0.00	260.00
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	39.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	10.00	25.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.3370	12.7655	9.1391	0.0186	0.7591	5.4780	1.3857	0.1378	5.0842	0.7185	0.0000	1,842.0081	1,842.0081	0.4217	0.0000	1,852.5510
2020	1.2023	11.5507	8.7721	0.0185	0.7627	0.5395	1.3022	0.1386	0.5000	0.6386	0.0000	1,805.6174	1,805.6174	0.4176	0.0000	1,816.0570
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.6508	0.0000	0.0000	0.6053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	1.3370	12.7655	9.1391	0.0186	0.7627	5.4780	1.3857	0.1386	5.0842	0.7185	0.0000	1,842.0081	1,842.0081	0.4217	0.0000	1,852.5510

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	3/31/2019	5	0	
2	Grading	Grading	4/1/2019	3/27/2020	5	260	
3	Site Preparation	Site Preparation	6/8/2019	6/7/2019	5	0	
4	Building Construction	Building Construction	11/2/2019	11/1/2019	5	0	
5	Paving	Paving	9/3/2022	9/2/2022	5	0	
6	Architectural Coating	Architectural Coating	11/19/2022	11/18/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 260

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Cranes	1	8.00	231	0.29
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Welders	1	4.00	46	0.45

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	1.1622	11.4939	7.8020	0.0133		0.6166	0.6166		0.5712	0.5712	0.0000	1,290.0332	1,290.0332	0.3927		1,299.8500
Total	1.1622	11.4939	7.8020	0.0133	0.4136	0.6166	1.0302	0.0447	0.5712	0.6159	0.0000	1,290.0332	1,290.0332	0.3927		1,299.8500

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.5000e-004	0.0290	6.1500e-003	7.0000e-005	2.0900e-003	1.1000e-004	2.2000e-003	5.6000e-004	1.0000e-004	6.6000e-004		8.0442	8.0442	6.1000e-004		8.0594
Vendor	0.0407	1.1493	0.3135	2.5000e-003	0.0640	7.7300e-003	0.0717	0.0184	7.4000e-003	0.0258		267.1389	267.1389	0.0198		267.6328
Worker	0.1333	0.0933	1.0174	2.7800e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		276.7918	276.7918	8.6800e-003		277.0088
Total	0.1748	1.2717	1.3371	5.3500e-003	0.3455	0.0100	0.3556	0.0931	9.5200e-003	0.1026		551.9749	551.9749	0.0290		552.7010

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

Chino Basin Production Wells, Refurbishment and Treatment Site

**SARCCUP
IEUA Well Site
Unmitigated**

Maximum Day

Phase	On-Site						Off-Site						Maximum Total					
	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Well Drilling (2019)	2.6501	26.694	20.9527	0.0524	1.3236	1.2719	0.1908	1.7216	1.5199	0.00661	0.3841	0.1128	2.8409	28.4156	22.4726	0.05901	1.7077	1.3847
Well Drilling (2020)	2.4618	24.8951	20.8997	0.0525	1.1832	1.1356	0.1725	1.5752	1.3813	0.00649	0.3806	0.1095	2.6343	26.4703	22.281	0.05899	1.5638	1.2451
Building Construction (2019)	0.4368	4.0418	3.7281	0.00517	0.2775	0.2562	0	0	0	0	0	0	0.4368	4.0418	3.7281	0.00517	0.2775	0.2562
Building Construction (2020)	0.3976	3.6788	3.6913	0.00517	0.2405	0.2221	0	0	0	0	0	0	0.3976	3.6788	3.6913	0.00517	0.2405	0.2221

Localized Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2019)	3.0869	30.7358	24.6808	0.05757	1.6011	1.5281
All Phases (2020)	2.8594	28.5739	24.591	0.05767	1.4237	1.3577
Maximum	3.0869	30.7358	24.6808	0.05767	1.6011	1.5281
SCAQMD LST Threshold (SRA 33)						
1 Acre at 25 Meters	N/A	118	863	N/A	5	4
Exceeds Threshold?	N/A	No	No	N/A	No	No

Regional Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2019)	3.2777	32.4574	26.2007	0.06418	1.9852	1.6409
All Phases (2020)	3.0319	30.1491	25.9723	0.06416	1.8043	1.4672
Maximum	3.2777	32.4574	26.2007	0.06418	1.9852	1.6409
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

SARCCUP: IEUA Well Site - South Coast Air Basin, Summer

SARCCUP: Chino Basin Production Well Site
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1,000.00	User Defined Unit	1.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Extraction Well

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	393.00
tblConstructionPhase	NumDays	1.00	393.00
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.4967	14.6508	12.2323	0.0293	0.3710	0.7316	1.1026	0.1004	0.6924	0.7928	0.0000	2,883.1847	2,883.1847	0.5653	0.0000	2,897.3178
2020	1.3773	13.5452	12.0392	0.0292	0.3710	0.6444	1.0154	0.1004	0.6097	0.7101	0.0000	2,840.7845	2,840.7845	0.5594	0.0000	2,854.7685
Maximum	1.4967	14.6508	12.2323	0.0293	0.3710	0.7316	1.1026	0.1004	0.6924	0.7928	0.0000	2,883.1847	2,883.1847	0.5653	0.0000	2,897.3178

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	9/30/2020	5	393	
2	Building Construction	Building Construction	4/1/2019	9/30/2020	5	393	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38
Well Drilling	Rubber Tired Dozers	0	7.00	247	0.40
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Well Drilling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8834	8.8980	6.9842	0.0175		0.4412	0.4412		0.4240	0.4240	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329
Total	0.8834	8.8980	6.9842	0.0175	0.0000	0.4412	0.4412	0.0000	0.4240	0.4240	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5000e-004	0.0189	3.7900e-003	5.0000e-005	1.9500e-003	7.0000e-005	2.0200e-003	5.1000e-004	7.0000e-005	5.8000e-004		5.4129	5.4129	3.9000e-004		5.4226
Vendor	0.0546	1.6071	0.3963	3.6000e-003	0.0896	0.0107	0.1002	0.0258	0.0102	0.0360		384.3170	384.3170	0.0259		384.9635
Worker	0.1214	0.0849	1.1198	2.9600e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		295.0904	295.0904	9.2500e-003		295.3216
Total	0.1765	1.7110	1.5199	6.6100e-003	0.3710	0.0129	0.3839	0.1004	0.0123	0.1127		684.8203	684.8203	0.0355		685.7076

3.2 Well Drilling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8206	8.2984	6.9666	0.0175		0.3944	0.3944		0.3785	0.3785	0.0000	1,680.8723	1,680.8723	0.3772		1,690.3025
Total	0.8206	8.2984	6.9666	0.0175	0.0000	0.3944	0.3944	0.0000	0.3785	0.3785	0.0000	1,680.8723	1,680.8723	0.3772		1,690.3025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.1000e-004	0.0177	3.6900e-003	5.0000e-005	1.9600e-003	6.0000e-005	2.0100e-003	5.1000e-004	5.0000e-005	5.7000e-004		5.3588	5.3588	3.8000e-004		5.3683
Vendor	0.0465	1.4745	0.3587	3.5700e-003	0.0896	7.3000e-003	0.0969	0.0258	6.9800e-003	0.0328		381.9078	381.9078	0.0244		382.5190
Worker	0.1121	0.0758	1.0190	2.8700e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		285.9591	285.9591	8.2400e-003		286.1651
Total	0.1591	1.5680	1.3813	6.4900e-003	0.3710	9.4900e-003	0.3805	0.1004	8.9900e-003	0.1094		673.2257	673.2257	0.0331		674.0523

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4368	4.0418	3.7281	5.1700e-003		0.2775	0.2775		0.2562	0.2562	0.0000	496.7495	496.7495	0.1491		500.4773
Total	0.4368	4.0418	3.7281	5.1700e-003		0.2775	0.2775		0.2562	0.2562	0.0000	496.7495	496.7495	0.1491		500.4773

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3976	3.6788	3.6913	5.1700e-003		0.2405	0.2405		0.2221	0.2221	0.0000	486.6866	486.6866	0.1491			490.4137
Total	0.3976	3.6788	3.6913	5.1700e-003		0.2405	0.2405		0.2221	0.2221	0.0000	486.6866	486.6866	0.1491			490.4137

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

SARCCUP: IEUA Well Site - South Coast Air Basin, Winter

SARCCUP: IEUA Well Site
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1,000.00	User Defined Unit	1.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Extraction Well

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	393.00
tblConstructionPhase	NumDays	1.00	393.00
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.5110	14.6614	12.1728	0.0290	0.3710	0.7318	1.1027	0.1004	0.6926	0.7930	0.0000	2,854.4726	2,854.4726	0.5666	0.0000	2,868.6368
2020	1.3906	13.5523	11.9832	0.0289	0.3710	0.6445	1.0155	0.1004	0.6098	0.7102	0.0000	2,812.5673	2,812.5673	0.5605	0.0000	2,826.5806
Maximum	1.5110	14.6614	12.1728	0.0290	0.3710	0.7318	1.1027	0.1004	0.6926	0.7930	0.0000	2,854.4726	2,854.4726	0.5666	0.0000	2,868.6368

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	9/30/2020	5	393	
2	Building Construction	Building Construction	4/1/2019	9/30/2020	5	393	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38
Well Drilling	Rubber Tired Dozers	0	7.00	247	0.40
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Well Drilling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8834	8.8980	6.9842	0.0175		0.4412	0.4412		0.4240	0.4240	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329
Total	0.8834	8.8980	6.9842	0.0175	0.0000	0.4412	0.4412	0.0000	0.4240	0.4240	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.6000e-004	0.0192	4.0700e-003	5.0000e-005	1.9500e-003	7.0000e-005	2.0200e-003	5.1000e-004	7.0000e-005	5.8000e-004		5.3218	5.3218	4.0000e-004		5.3319
Vendor	0.0569	1.6091	0.4389	3.5000e-003	0.0896	0.0108	0.1004	0.0258	0.0104	0.0361		373.9945	373.9945	0.0277		374.6859
Worker	0.1333	0.0933	1.0174	2.7800e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		276.7918	276.7918	8.6800e-003		277.0088
Total	0.1908	1.7216	1.4604	6.3300e-003	0.3710	0.0131	0.3841	0.1004	0.0124	0.1128		656.1082	656.1082	0.0367		657.0266

3.2 Well Drilling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8206	8.2984	6.9666	0.0175		0.3944	0.3944		0.3785	0.3785	0.0000	1,680.8723	1,680.8723	0.3772		1,690.3025
Total	0.8206	8.2984	6.9666	0.0175	0.0000	0.3944	0.3944	0.0000	0.3785	0.3785	0.0000	1,680.8723	1,680.8723	0.3772		1,690.3025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.2000e-004	0.0180	3.9400e-003	5.0000e-005	1.9600e-003	6.0000e-005	2.0100e-003	5.1000e-004	6.0000e-005	5.7000e-004		5.2673	5.2673	3.9000e-004		5.2771
Vendor	0.0486	1.4740	0.3974	3.4800e-003	0.0896	7.4100e-003	0.0970	0.0258	7.0900e-003	0.0329		371.5284	371.5284	0.0261		372.1815
Worker	0.1234	0.0833	0.9240	2.6900e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		268.2128	268.2128	7.7200e-003		268.4058
Total	0.1725	1.5752	1.3253	6.2200e-003	0.3710	9.6000e-003	0.3806	0.1004	9.1100e-003	0.1095		645.0084	645.0084	0.0342		645.8644

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4368	4.0418	3.7281	5.1700e-003		0.2775	0.2775		0.2562	0.2562	0.0000	496.7495	496.7495	0.1491		500.4773
Total	0.4368	4.0418	3.7281	5.1700e-003		0.2775	0.2775		0.2562	0.2562	0.0000	496.7495	496.7495	0.1491		500.4773

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3976	3.6788	3.6913	5.1700e-003		0.2405	0.2405		0.2221	0.2221	0.0000	486.6866	486.6866	0.1491			490.4137
Total	0.3976	3.6788	3.6913	5.1700e-003		0.2405	0.2405		0.2221	0.2221	0.0000	486.6866	486.6866	0.1491			490.4137

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

Mitigated AQ Construction Emissions

SARCCUP

Emissions Summary - Mitigated

Project Components	Max Daily Emissions - Regional					
	ROG	NOX	CO	SO2	PM10	PM2.5
Arlington Recharge Extraction Wells (2019)	0.59	10.12	11.81	0.02	1.46	0.62
Arlington Recharge Extraction Wells (2020)	0.58	9.97	11.67	0.02	1.46	0.62
Arlington Recharge Pipeline/Facilities (2020)	1.59	27.26	36.36	0.06	2.02	1.56
Arlington Recharge Pipeline/Facilities (2021)	1.55	27.07	36.21	0.06	2.00	1.55
Arlington Recharge Pipeline/Facilities (2022)	1.53	26.96	36.11	0.06	2.00	1.54
Arlington Recharge Pipeline/Facilities (2023)	1.50	26.57	36.00	0.06	1.99	1.54
Canyon Pump Station (2020)	2.10	35.55	47.67	0.08	2.33	1.95
Canyon Pump Station (2021)	2.05	35.29	47.49	0.08	2.31	1.93
Canyon Pump Station (2022)	2.01	35.13	47.37	0.08	2.30	1.92
Canyon Pump Station (2023)	2.06	36.49	50.01	0.08	2.40	2.01
ID-4 CRA Crossing (2019)	1.34	12.77	9.21	0.02	1.39	0.72
ID-4 CRA Crossing (2020)	1.20	11.55	8.84	0.02	1.30	0.64
IEUA Well Site (2019)	0.75	12.98	15.48	0.03	1.02	0.75
IEUA Well Site (2020)	0.73	12.83	15.40	0.03	1.02	0.74
Arundo Removal (2019)	1.20	23.68	31.50	0.05	13.46	7.93
Arundo Removal (2020)	1.19	23.66	31.45	0.05	13.46	7.93
Arundo Removal (2021)	1.18	23.63	31.41	0.05	13.45	7.93
Arundo Maintenance (2021)	0.00	0.00	0.04	0.00	0.01	0.00
Arundo Maintenance (2022)	0.00	0.00	0.03	0.00	0.01	0.00
Arundo Maintenance (2023)	0.00	0.00	0.03	0.00	0.01	0.00

Overlapping Activities	Max Daily Emissions - Regional					
	ROG	NOX	CO	SO2	PM10	PM2.5
Arlington Wells + ID-4 + IEUA (2019)	2.68	35.86	36.50	0.07	3.87	2.09
Arlington Wells + ID-4 + IEUA + Arundo (2019)	3.88	59.54	68.00	0.12	17.32	10.02
Arlington Wells + ID-4 + IEUA + Arundo (2020)	3.70	58.01	67.36	0.12	17.24	9.94
Arlington Facilities + Canyon + IEUA + Arundo (2020)	5.62	99.30	130.88	0.21	18.82	12.18
Arlington Facilities + Canyon + Arundo (2020)	4.88	86.47	115.48	0.19	17.80	11.44
Arlington Facilities + Canyon + Arundo (2021)	4.78	85.99	115.12	0.18	17.77	11.41
Arlington Facilities + Canyon + Arundo M (2021)	3.60	62.36	83.74	0.13	4.33	3.48
Arlington Facilities + Canyon + Arundo M (2022)	3.54	62.10	83.52	0.13	4.31	3.46
Arlington Facilities + Canyon + Arundo M (2023)	3.56	63.06	86.04	0.14	4.40	3.55
Maximum	5.62	99.30	130.88	0.21	18.82	12.18
SCAQMD Regional Threshold	75.00	100.00	550.00	150.00	150.00	55.00
Exceeds Threshold?	No	No	No	No	No	No

Arlington Recharge

SARCCUP
Arlington Recharge
Mitigated

Maximum Day

Phase	On-Site						Off-Site						Maximum Total					
	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Well Drilling (2019)	0.4031	8.3855	10.285	0.0175	1.0786	0.511	0.1911	1.7314	1.5219	0.00664	0.3842	0.1129	0.5942	10.1169	11.8069	0.02414	1.4628	0.6239
Well Drilling (2020)	0.4031	8.3855	10.285	0.0175	1.0786	0.511	0.1728	1.5844	1.3832	0.00651	0.3843	0.1105	0.5759	9.9699	11.6682	0.02401	1.4629	0.6215
Excavation and Shoring (2020)	0.6718	13.4549	18.6439	0.0274	0.9367	0.7628	0.1687	1.4602	1.3537	0.00621	0.3734	0.1071	0.8405	14.9151	19.9976	0.03361	1.3101	0.8699
Excavation and Shoring (2021)	0.6718	13.4549	18.6439	0.0274	0.9367	0.7628	0.1539	1.3247	1.2427	0.00609	0.3687	0.1028	0.8257	14.7796	19.8866	0.03349	1.3054	0.8656
Excavation and Shoring (2022)	0.6718	13.4549	18.6439	0.0274	0.9367	0.7628	0.1447	1.2537	1.1559	0.00596	0.3683	0.1025	0.8165	14.7086	19.7998	0.03336	1.305	0.8653
Excavation and Shoring (2023)	0.6718	13.4549	18.6439	0.0274	0.9367	0.7628	0.1292	0.9525	1.0615	0.00575	0.3683	0.1016	0.801	14.4074	19.7054	0.03315	1.305	0.8644
Pipeline Installation (2020)	0.4907	7.3113	9.7653	0.0152	0.3863	0.3863	0.0104	0.316	0.0852	0.00077	0.0208	0.00705	0.5011	7.6273	9.8505	0.01597	0.4071	0.39335
Pipeline Installation (2021)	0.471	7.2801	9.7412	0.0152	0.3799	0.3799	0.00887	0.2873	0.0776	0.00076	0.0198	0.0061	0.47987	7.5674	9.8188	0.01596	0.3997	0.386
Pipeline Installation (2022)	0.458	7.2571	9.7297	0.0152	0.3748	0.3748	0.00832	0.2729	0.0735	0.00075	0.0197	0.00603	0.46632	7.53	9.8032	0.01595	0.3945	0.38083
Pipeline Installation (2023)	0.4469	7.2359	9.7208	0.0152	0.3704	0.3704	0.00618	0.2057	0.0651	0.00073	0.0194	0.00576	0.45308	7.4416	9.7859	0.01593	0.3898	0.37616
Building Construction (2020)	0.1577	2.8707	3.735	0.00517	0.1925	0.1925	0	0	0	0	0	0	0.1577	2.8707	3.735	0.00517	0.1925	0.1925
Building Construction (2021)	0.1577	2.8707	3.7349	0.00517	0.1925	0.195	0	0	0	0	0	0	0.1577	2.8707	3.7349	0.00517	0.1925	0.195
Building Construction (2022)	0.1577	2.8707	3.735	0.00517	0.1925	0.1925	0	0	0	0	0	0	0.1577	2.8707	3.735	0.00517	0.1925	0.1925
Building Construction (2023)	0.1577	2.8707	3.7349	0.00518	0.1925	0.1925	0	0	0	0	0	0	0.1577	2.8707	3.7349	0.00518	0.1925	0.1925
Street Restoration (2020)	0.09	1.8516	2.7734	0.00366	0.1054	0.1054	0	0	0	0	0	0	0.09	1.8516	2.7734	0.00366	0.1054	0.1054
Street Restoration (2021)	0.09	1.8516	2.7734	0.00366	0.1054	0.1054	0	0	0	0	0	0	0.09	1.8516	2.7734	0.00366	0.1054	0.1054
Street Restoration (2022)	0.09	1.8516	2.7734	0.00366	0.1054	0.1054	0	0	0	0	0	0	0.09	1.8516	2.7734	0.00366	0.1054	0.1054
Street Restoration (2023)	0.09	1.8516	2.7734	0.00366	0.1054	0.1054	0	0	0	0	0	0	0.09	1.8516	2.7734	0.00366	0.1054	0.1054

Localized Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
Well Drilling (2019)	0.4031	8.3855	10.285	0.0175	1.0786	0.511
Well Drilling (2020)	0.4031	8.3855	10.285	0.0175	1.0786	0.511
All Other (2020)	1.4102	25.4885	34.9176	0.05143	1.6209	1.447
All Other (2021)	1.3905	25.4573	34.8934	0.05143	1.6145	1.4431
All Other (2022)	1.3775	25.4343	34.882	0.05143	1.6094	1.4355
All Other (2023)	1.3664	25.4131	34.873	0.05144	1.605	1.4311
Maximum	1.4102	25.4885	34.9176	0.05144	1.6209	1.447

SCAQMD LST Threshold (SRA 23)

1-Acre @ 25 Meters	N/A	118	602	N/A	4	3
Exceeds Threshold?	N/A	No	No	N/A	No	No

Regional Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
Well Drilling (2019)	0.5942	10.1169	11.8069	0.02414	1.4628	0.6239
Well Drilling (2020)	0.5759	9.9699	11.6682	0.02401	1.4629	0.6215
All Other (2020)	1.5893	27.2647	36.3565	0.05841	2.0151	1.56115
All Other (2021)	1.55327	27.0693	36.2137	0.05828	2.003	1.552
All Other (2022)	1.53052	26.9609	36.1114	0.05814	1.9974	1.54403
All Other (2023)	1.50178	26.5713	35.9996	0.05792	1.9927	1.53846
Maximum	1.5893	27.2647	36.3565	0.05841	2.0151	1.56115
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

SARCCUP: Arlington Recharge - South Coast Air Basin, Summer

SARCCUP: Arlington Recharge - Mitigated
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	10,000.00	User Defined Unit	2.00	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Two Pump stations: Assume approximately 5,000 SF and 1 acre each

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases except Well Drilling occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway/Water Trucks included as Vendor Trucks.

Grading - Assume 0.5 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	5,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	15,000.00	0.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	200.00	850.00

tblConstructionPhase	NumDays	4.00	850.00
tblConstructionPhase	NumDays	10.00	850.00
tblConstructionPhase	NumDays	2.00	260.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	10,000.00
tblLandUse	LotAcreage	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	25.00

tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	13.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	25.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	4.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.5799	10.1062	11.8069	0.0241	1.0074	0.4552	1.4626	0.1692	0.4546	0.6237	0.0000	2,389.2040	2,389.2040	0.4164	0.0000	2,399.6144
2020	1.5756	27.2577	36.3482	0.0584	1.0110	1.4365	2.0151	0.1701	1.4360	1.5611	0.0000	5,636.3903	5,636.3903	1.3522	0.0000	5,670.1951
2021	1.5403	27.0655	36.2059	0.0582	0.5782	1.4248	2.0030	0.1250	1.4245	1.5495	0.0000	5,624.0014	5,624.0014	1.3437	0.0000	5,657.5931
2022	1.5181	26.9584	36.1040	0.0581	0.5782	1.4193	1.9975	0.1250	1.4190	1.5440	0.0000	5,611.0504	5,611.0504	1.3380	0.0000	5,644.4999
2023	1.4901	26.5707	35.9941	0.0579	0.5795	1.4133	1.9928	0.1253	1.4131	1.5385	0.0000	5,588.7829	5,588.7829	1.3296	0.0000	5,622.0224
Maximum	1.5756	27.2577	36.3482	0.0584	1.0110	1.4365	2.0151	0.1701	1.4360	1.5611	0.0000	5,636.3903	5,636.3903	1.3522	0.0000	5,670.1951

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	3/27/2020	5	260	
2	Architectural Coating	Architectural Coating	2/25/2020	2/24/2020	5	0	
3	Excavation and Shoring	Grading	3/30/2020	6/30/2023	5	850	
4	Pipeline Installation	Trenching	3/30/2020	6/30/2023	5	850	
5	Building Construction	Building Construction	3/30/2020	6/30/2023	5	850	
6	Street Restoration	Paving	3/30/2020	6/30/2023	5	850	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Concrete/Industrial Saws	0	8.00	81	0.73
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38
Well Drilling	Rubber Tired Dozers	0	8.00	247	0.40
Well Drilling	Scrapers	0	8.00	367	0.48
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	0	6.00	78	0.48
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38

Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Scrapers	0	8.00	367	0.48
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Graders	0	8.00	187	0.41
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Rubber Tired Dozers	0	8.00	247	0.40
Pipeline Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	8.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	25.00	13.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Well Drilling - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6363	0.0000	0.6363	0.0687	0.0000	0.0687			0.0000			0.0000
Off-Road	0.4031	8.3855	10.2850	0.0175		0.4423	0.4423		0.4423	0.4423	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329
Total	0.4031	8.3855	10.2850	0.0175	0.6363	0.4423	1.0786	0.0687	0.4423	0.5110	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.3000e-004	0.0286	5.7300e-003	8.0000e-005	2.0900e-003	1.1000e-004	2.1900e-003	5.6000e-004	1.0000e-004	6.6000e-004		8.1817	8.1817	5.9000e-004		8.1964
Vendor	0.0546	1.6071	0.3963	3.6000e-003	0.0896	0.0107	0.1002	0.0258	0.0102	0.0360		384.3170	384.3170	0.0259		384.9635
Worker	0.1214	0.0849	1.1198	2.9600e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		295.0904	295.0904	9.2500e-003		295.3216
Total	0.1768	1.7207	1.5219	6.6400e-003	0.3711	0.0130	0.3841	0.1005	0.0123	0.1128		687.5891	687.5891	0.0357		688.4815

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Excavation and Shoring - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618
Total	0.6718	13.4549	18.6439	0.0274	0.1950	0.7417	0.9367	0.0211	0.7417	0.7628	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.3000e-004	8.1900e-003	1.7000e-003	2.0000e-005	1.7900e-003	3.0000e-005	1.8100e-003	4.5000e-004	3.0000e-005	4.8000e-004		2.4777	2.4777	1.8000e-004		2.4820
Vendor	0.0432	1.3692	0.3331	3.3200e-003	0.0832	6.7800e-003	0.0900	0.0240	6.4800e-003	0.0304		354.6287	354.6287	0.0227		355.1962
Worker	0.1121	0.0758	1.0190	2.8700e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		285.9591	285.9591	8.2400e-003		286.1651
Total	0.1555	1.4532	1.3537	6.2100e-003	0.3644	8.9400e-003	0.3733	0.0985	8.4700e-003	0.1070		643.0654	643.0654	0.0311		643.8433

3.4 Excavation and Shoring - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654
Total	0.6718	13.4549	18.6439	0.0274	0.1950	0.7417	0.9367	0.0211	0.7417	0.7628	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2000e-004	7.6300e-003	1.6800e-003	2.0000e-005	1.3900e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4508	2.4508	1.7000e-004		2.4551
Vendor	0.0366	1.2450	0.3023	3.2900e-003	0.0832	2.5400e-003	0.0857	0.0240	2.4300e-003	0.0264		351.9669	351.9669	0.0218		352.5110
Worker	0.1046	0.0682	0.9387	2.7800e-003	0.2794	2.0700e-003	0.2815	0.0741	1.9000e-003	0.0760		276.7246	276.7246	7.4600e-003		276.9110
Total	0.1414	1.3209	1.2427	6.0900e-003	0.3640	4.6300e-003	0.3687	0.0984	4.3500e-003	0.1028		631.1422	631.1422	0.0294		631.8771

3.4 Excavation and Shoring - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456
Total	0.6718	13.4549	18.6439	0.0274	0.1950	0.7417	0.9367	0.0211	0.7417	0.7628	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1000e-004	7.0600e-003	1.6700e-003	2.0000e-005	1.4000e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4216	2.4216	1.7000e-004		2.4258
Vendor	0.0343	1.1825	0.2862	3.2600e-003	0.0832	2.2100e-003	0.0854	0.0240	2.1200e-003	0.0261		348.8813	348.8813	0.0210		349.4067
Worker	0.0982	0.0617	0.8680	2.6800e-003	0.2794	2.0100e-003	0.2815	0.0741	1.8500e-003	0.0760		266.8158	266.8158	6.7400e-003		266.9844
Total	0.1327	1.2512	1.1559	5.9600e-003	0.3640	4.2400e-003	0.3683	0.0984	3.9900e-003	0.1024		618.1187	618.1187	0.0279		618.8169

3.4 Excavation and Shoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393
Total	0.6718	13.4549	18.6439	0.0274	0.1950	0.7417	0.9367	0.0211	0.7417	0.7628	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.5500e-003	1.5200e-003	2.0000e-005	2.6700e-003	1.0000e-005	2.6800e-003	6.7000e-004	1.0000e-005	6.8000e-004		2.3223	2.3223	1.6000e-004		2.3262
Vendor	0.0255	0.8915	0.2584	3.1500e-003	0.0832	1.0200e-003	0.0842	0.0240	9.8000e-004	0.0249		338.0474	338.0474	0.0186		338.5119
Worker	0.0923	0.0558	0.8016	2.5800e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8000e-003	0.0759		256.8775	256.8775	6.0800e-003		257.0295
Total	0.1179	0.9518	1.0615	5.7500e-003	0.3653	2.9900e-003	0.3683	0.0987	2.7900e-003	0.1015		597.2472	597.2472	0.0248		597.8676

3.5 Pipeline Installation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4907	7.3113	9.7653	0.0152		0.3863	0.3863		0.3863	0.3863	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710
Total	0.4907	7.3113	9.7653	0.0152		0.3863	0.3863		0.3863	0.3863	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003		81.9684
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003		81.9684

3.5 Pipeline Installation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4710	7.2801	9.7412	0.0152		0.3799	0.3799		0.3799	0.3799	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138
Total	0.4710	7.2801	9.7412	0.0152		0.3799	0.3799		0.3799	0.3799	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003			81.3487
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003			81.3487

3.5 Pipeline Installation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.4580	7.2571	9.7297	0.0152		0.3748	0.3748		0.3748	0.3748	0.0000	1,438.8860	1,438.8860	0.3153			1,446.7685
Total	0.4580	7.2571	9.7297	0.0152		0.3748	0.3748		0.3748	0.3748	0.0000	1,438.8860	1,438.8860	0.3153			1,446.7685

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003			80.6323
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003			80.6323

3.5 Pipeline Installation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4469	7.2359	9.7208	0.0152		0.3704	0.3704		0.3704	0.3704	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390
Total	0.4469	7.2359	9.7208	0.0152		0.3704	0.3704		0.3704	0.3704	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181

3.6 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.6866	486.6866	0.1491		490.4137
Total	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.6866	486.6866	0.1491		490.4137

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.6 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.1577	2.8707	3.7349	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.8181	486.8181	0.1491			490.5463
Total	0.1577	2.8707	3.7349	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.8181	486.8181	0.1491			490.5463

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.6 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	487.1570	487.1570	0.1492		490.8879
Total	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	487.1570	487.1570	0.1492		490.8879

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.6 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1577	2.8707	3.7349	5.1800e-003		0.1925	0.1925		0.1925	0.1925	0.0000	487.4946	487.4946	0.1494		491.2282
Total	0.1577	2.8707	3.7349	5.1800e-003		0.1925	0.1925		0.1925	0.1925	0.0000	487.4946	487.4946	0.1494		491.2282

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6693	354.6693	0.1147		357.5370
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6693	354.6693	0.1147		357.5370

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.5749	354.5749	0.1147		357.4418
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.5749	354.5749	0.1147		357.4418

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6809	354.6809	0.1147		357.5487
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6809	354.6809	0.1147		357.5487

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.7 Street Restoration - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6625	354.6625	0.1147			357.5301
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6625	354.6625	0.1147			357.5301

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

SARCCUP: Arlington Recharge - South Coast Air Basin, Winter

SARCCUP: Arlington Recharge - Mitigated
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	10,000.00	User Defined Unit	2.00	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Two Pump stations: Assume approximately 5,000 SF and 1 acre each

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases except Well Drilling occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway/Water Trucks included as Vendor Trucks.

Grading - Assume 0.5 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	5,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	15,000.00	0.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	200.00	850.00

tblConstructionPhase	NumDays	4.00	850.00
tblConstructionPhase	NumDays	10.00	850.00
tblConstructionPhase	NumDays	2.00	260.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	10,000.00
tblLandUse	LotAcreage	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	25.00

tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	13.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	25.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	4.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.5942	10.1169	11.7475	0.0238	1.0074	0.4554	1.4628	0.1692	0.4547	0.6239	0.0000	2,360.4454	2,360.4454	0.4177	0.0000	2,370.8870
2020	1.5893	27.2646	36.2976	0.0581	1.0110	1.4366	2.0152	0.1701	1.4361	1.5612	0.0000	5,606.7394	5,606.7394	1.3536	0.0000	5,640.5794
2021	1.5532	27.0686	36.1585	0.0579	0.5782	1.4249	2.0031	0.1250	1.4246	1.5496	0.0000	5,594.9806	5,594.9806	1.3450	0.0000	5,628.6066
2022	1.5305	26.9601	36.0599	0.0578	0.5782	1.4193	1.9975	0.1250	1.4191	1.5441	0.0000	5,582.6804	5,582.6804	1.3393	0.0000	5,616.1630
2023	1.5017	26.5702	35.9449	0.0576	0.5795	1.4134	1.9929	0.1253	1.4132	1.5385	0.0000	5,561.5785	5,561.5785	1.3306	0.0000	5,594.8427
Maximum	1.5893	27.2646	36.2976	0.0581	1.0110	1.4366	2.0152	0.1701	1.4361	1.5612	0.0000	5,606.7394	5,606.7394	1.3536	0.0000	5,640.5794

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	3/27/2020	5	260	
2	Architectural Coating	Architectural Coating	2/25/2020	2/24/2020	5	0	
3	Excavation and Shoring	Grading	3/30/2020	6/30/2023	5	850	
4	Pipeline Installation	Trenching	3/30/2020	6/30/2023	5	850	
5	Building Construction	Building Construction	3/30/2020	6/30/2023	5	850	
6	Street Restoration	Paving	3/30/2020	6/30/2023	5	850	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Concrete/Industrial Saws	0	8.00	81	0.73
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38
Well Drilling	Rubber Tired Dozers	0	8.00	247	0.40
Well Drilling	Scrapers	0	8.00	367	0.48
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	0	6.00	78	0.48
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29

Excavation and Shoring	Excavators	2	8.00	158	0.38
Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Scrapers	0	8.00	367	0.48
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Graders	0	8.00	187	0.41
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Rubber Tired Dozers	0	8.00	247	0.40
Pipeline Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	8.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	
Well Drilling		3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating		0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring		7	25.00	13.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation		4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction		3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration		2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Well Drilling - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6363	0.0000	0.6363	0.0687	0.0000	0.0687			0.0000			0.0000
Off-Road	0.4031	8.3855	10.2850	0.0175		0.4423	0.4423		0.4423	0.4423	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329
Total	0.4031	8.3855	10.2850	0.0175	0.6363	0.4423	1.0786	0.0687	0.4423	0.5110	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.5000e-004	0.0290	6.1500e-003	7.0000e-005	2.0900e-003	1.1000e-004	2.2000e-003	5.6000e-004	1.0000e-004	6.6000e-004		8.0442	8.0442	6.1000e-004		8.0594
Vendor	0.0569	1.6091	0.4389	3.5000e-003	0.0896	0.0108	0.1004	0.0258	0.0104	0.0361		373.9945	373.9945	0.0277		374.6859
Worker	0.1333	0.0933	1.0174	2.7800e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		276.7918	276.7918	8.6800e-003		277.0088
Total	0.1911	1.7314	1.4625	6.3500e-003	0.3711	0.0131	0.3842	0.1005	0.0125	0.1129		658.8305	658.8305	0.0370		659.7541

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Excavation and Shoring - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618
Total	0.6718	13.4549	18.6439	0.0274	0.1950	0.7417	0.9367	0.0211	0.7417	0.7628	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4000e-004	8.3000e-003	1.8200e-003	2.0000e-005	1.7900e-003	3.0000e-005	1.8100e-003	4.5000e-004	3.0000e-005	4.8000e-004		2.4353	2.4353	1.8000e-004		2.4399
Vendor	0.0451	1.3687	0.3690	3.2300e-003	0.0832	6.8800e-003	0.0901	0.0240	6.5800e-003	0.0305		344.9906	344.9906	0.0243		345.5971
Worker	0.1234	0.0833	0.9240	2.6900e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		268.2128	268.2128	7.7200e-003		268.4058
Total	0.1687	1.4602	1.2948	5.9400e-003	0.3644	9.0400e-003	0.3734	0.0985	8.5700e-003	0.1071		615.6388	615.6388	0.0322		616.4428

3.4 Excavation and Shoring - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654
Total	0.6718	13.4549	18.6439	0.0274	0.1950	0.7417	0.9367	0.0211	0.7417	0.7628	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.3000e-004	7.7200e-003	1.7900e-003	2.0000e-005	1.3900e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4087	2.4087	1.8000e-004		2.4132
Vendor	0.0384	1.2420	0.3360	3.2000e-003	0.0832	2.6200e-003	0.0858	0.0240	2.5100e-003	0.0265		342.3859	342.3859	0.0233		342.9674
Worker	0.1153	0.0749	0.8497	2.6000e-003	0.2794	2.0700e-003	0.2815	0.0741	1.9000e-003	0.0760		259.5378	259.5378	6.9800e-003		259.7123
Total	0.1539	1.3247	1.1875	5.8200e-003	0.3640	4.7100e-003	0.3687	0.0984	4.4300e-003	0.1028		604.3324	604.3324	0.0304		605.0929

3.4 Excavation and Shoring - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456
Total	0.6718	13.4549	18.6439	0.0274	0.1950	0.7417	0.9367	0.0211	0.7417	0.7628	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2000e-004	7.1400e-003	1.7700e-003	2.0000e-005	1.4000e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.3796	2.3796	1.8000e-004		2.3840
Vendor	0.0361	1.1789	0.3183	3.1700e-003	0.0832	2.2800e-003	0.0855	0.0240	2.1800e-003	0.0261		339.3287	339.3287	0.0224		339.8898
Worker	0.1084	0.0677	0.7844	2.5100e-003	0.2794	2.0100e-003	0.2815	0.0741	1.8500e-003	0.0760		250.2447	250.2447	6.3000e-003		250.4023
Total	0.1447	1.2537	1.1044	5.7000e-003	0.3640	4.3100e-003	0.3683	0.0984	4.0500e-003	0.1025		591.9531	591.9531	0.0289		592.6762

3.4 Excavation and Shoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1950	0.0000	0.1950	0.0211	0.0000	0.0211			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393
Total	0.6718	13.4549	18.6439	0.0274	0.1950	0.7417	0.9367	0.0211	0.7417	0.7628	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.5800e-003	1.5900e-003	2.0000e-005	2.6700e-003	1.0000e-005	2.6800e-003	6.7000e-004	1.0000e-005	6.8000e-004		2.2823	2.2823	1.6000e-004		2.2864
Vendor	0.0268	0.8867	0.2823	3.0700e-003	0.0832	1.0700e-003	0.0843	0.0240	1.0300e-003	0.0250		328.9392	328.9392	0.0197		329.4318
Worker	0.1023	0.0612	0.7229	2.4200e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8000e-003	0.0759		240.9232	240.9232	5.6800e-003		241.0652
Total	0.1292	0.9525	1.0068	5.5100e-003	0.3653	3.0400e-003	0.3683	0.0987	2.8400e-003	0.1016		572.1446	572.1446	0.0256		572.7834

3.5 Pipeline Installation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4907	7.3113	9.7653	0.0152		0.3863	0.3863		0.3863	0.3863	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710
Total	0.4907	7.3113	9.7653	0.0152		0.3863	0.3863		0.3863	0.3863	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003		79.7532
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003		79.7532

3.5 Pipeline Installation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4710	7.2801	9.7412	0.0152		0.3799	0.3799		0.3799	0.3799	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138
Total	0.4710	7.2801	9.7412	0.0152		0.3799	0.3799		0.3799	0.3799	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003		79.1463
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003		79.1463

3.5 Pipeline Installation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4580	7.2571	9.7297	0.0152		0.3748	0.3748		0.3748	0.3748	0.0000	1,438.8860	1,438.8860	0.3153		1,446.7685
Total	0.4580	7.2571	9.7297	0.0152		0.3748	0.3748		0.3748	0.3748	0.0000	1,438.8860	1,438.8860	0.3153		1,446.7685

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361

3.5 Pipeline Installation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4469	7.2359	9.7208	0.0152		0.3704	0.3704		0.3704	0.3704	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390
Total	0.4469	7.2359	9.7208	0.0152		0.3704	0.3704		0.3704	0.3704	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003		76.0227
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003		76.0227

3.6 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.6866	486.6866	0.1491		490.4137
Total	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.6866	486.6866	0.1491		490.4137

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.6 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.1577	2.8707	3.7349	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.8181	486.8181	0.1491			490.5463
Total	0.1577	2.8707	3.7349	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.8181	486.8181	0.1491			490.5463

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.6 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	487.1570	487.1570	0.1492		490.8879
Total	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	487.1570	487.1570	0.1492		490.8879

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.6 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1577	2.8707	3.7349	5.1800e-003		0.1925	0.1925		0.1925	0.1925	0.0000	487.4946	487.4946	0.1494		491.2282
Total	0.1577	2.8707	3.7349	5.1800e-003		0.1925	0.1925		0.1925	0.1925	0.0000	487.4946	487.4946	0.1494		491.2282

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.7 Street Restoration - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6693	354.6693	0.1147			357.5370
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6693	354.6693	0.1147			357.5370

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.7 Street Restoration - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.5749	354.5749	0.1147		357.4418
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.5749	354.5749	0.1147		357.4418

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.7 Street Restoration - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6809	354.6809	0.1147		357.5487
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6809	354.6809	0.1147		357.5487

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

3.7 Street Restoration - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6625	354.6625	0.1147			357.5301
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6625	354.6625	0.1147			357.5301

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

Arundo Removal

SARCCUP
Arundo Removal
Mitigated

Maximum Day

Phase	On-Site						Off-Site						Maximum Total					
	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Mowing/Clearing/Grubbing (2019)	1.1283	23.4085	30.9542	0.0496	13.3175	7.8938	0.0615	0.2672	0.5045	0.0017	0.127	0.0356	1.1898	23.6757	31.4587	0.0513	13.4445	7.9294
Mowing/Clearing/Grubbing (2020)	1.1283	23.4085	30.9542	0.0497	13.3175	7.8938	0.0563	0.2439	0.4588	0.00166	0.1265	0.0351	1.1846	23.6524	31.413	0.05136	13.444	7.9289
Mowing/Clearing/Grubbing (2021)	1.1283	23.4085	30.9542	0.0497	13.3175	7.8938	0.052	0.2211	0.422	0.00162	0.1258	0.0345	1.1803	23.6296	31.3762	0.05132	13.4433	7.9283
Maintenance/Monitoring (2019)	0	0	0	0	0	0	0.00533	0.00373	0.0448	0.00012	0.0113	0.00304	0.00533	0.00373	0.0448	0.00012	0.0113	0.00304
Maintenance/Monitoring (2020)	0	0	0	0	0	0	0.00493	0.00333	0.0408	0.00011	0.0113	0.00304	0.00493	0.00333	0.0408	0.00011	0.0113	0.00304
Maintenance/Monitoring (2021)	0	0	0	0	0	0	0.00461	0.003	0.0376	0.00011	0.0113	0.00304	0.00461	0.003	0.0376	0.00011	0.0113	0.00304
Maintenance/Monitoring (2022)	0	0	0	0	0	0	0.00434	0.00271	0.0347	0.00011	0.0113	0.00304	0.00434	0.00271	0.0347	0.00011	0.0113	0.00304
Maintenance/Monitoring (2023)	0	0	0	0	0	0	0.00409	0.00245	0.0321	0.0001	0.0113	0.00304	0.00409	0.00245	0.0321	0.0001	0.0113	0.00304

Localized Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2019)	1.1283	23.4085	30.9542	0.0496	13.3175	7.8938
All Phases (2020)	1.1283	23.4085	30.9542	0.0497	13.3175	7.8938
All Phases (2021)	1.1283	23.4085	30.9542	0.0497	13.3175	7.8938
Maintenance (2021)	0	0	0	0	0	0
Maintenance (2022)	0	0	0	0	0	0
Maintenance (2023)	0	0	0	0	0	0
Maximum	1.1283	23.4085	30.9542	0.0497	13.3175	7.8938

SCAQMD LST Threshold (SRA 22)						
5 Acres at 50 Meters	N/A	302	2470	N/A	37	11
Exceeds Threshold?	N/A	No	No	N/A	No	No

SCAQMD LST Threshold (SRA 23)						
5 Acres at 50 Meters	N/A	302	2178	N/A	40	10
Exceeds Threshold?	N/A	No	No	N/A	No	No

Regional Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2019)	1.19513	23.67943	31.5035	0.05142	13.4558	7.93244
All Phases (2020)	1.18953	23.65573	31.4538	0.05147	13.4553	7.93194
All Phases (2021)	1.18491	23.6326	31.4138	0.05143	13.4546	7.93134
Maintenance (2021)	0.00461	0.003	0.0376	0.00011	0.0113	0.00304
Maintenance (2022)	0.00434	0.00271	0.0347	0.00011	0.0113	0.00304
Maintenance (2023)	0.00409	0.00245	0.0321	0.0001	0.0113	0.00304
Maximum	1.19513	23.67943	31.5035	0.05147	13.4558	7.93244
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Arundo Removal - South Coast Air Basin, Summer

**Arundo Removal - Mitigated
South Coast Air Basin, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	640.00	User Defined Unit	640.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Arundo Removal along Santa Ana River

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. Off-Highway Trucks included as Vendor Trucks

Demolition -

Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	420.00	478.00
tblConstructionPhase	NumDays	420.00	1,000.00
tblLandUse	LotAcreage	0.00	640.00
tblOffRoadEquipment	HorsePower	172.00	88.00
tblOffRoadEquipment	LoadFactor	0.42	0.34
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	40.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	1.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.1894	23.6755	31.5035	0.0515	12.1799	1.2758	13.4557	6.6567	1.2757	7.9324	0.0000	5,036.8870	5,036.8870	1.4792	0.0000	5,073.8678
2020	1.1842	23.6525	31.4538	0.0514	12.1799	1.2753	13.4552	6.6567	1.2752	7.9319	0.0000	4,935.8989	4,935.8989	1.4793	0.0000	4,972.8816
2021	1.1799	23.6301	31.4137	0.0514	12.1799	1.2746	13.4546	6.6567	1.2745	7.9313	0.0000	4,931.9105	4,931.9105	1.4790	0.0000	4,968.8849
2022	3.9300e-003	2.4700e-003	0.0347	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	10.6726	10.6726	2.7000e-004	0.0000	10.6794
2023	3.6900e-003	2.2300e-003	0.0321	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	10.2751	10.2751	2.4000e-004	0.0000	10.2812
Maximum	1.1894	23.6755	31.5035	0.0515	12.1799	1.2758	13.4557	6.6567	1.2757	7.9324	0.0000	5,036.8870	5,036.8870	1.4793	0.0000	5,073.8678

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mowing/Clearing/Grubbing	Site Preparation	9/2/2019	6/30/2021	5	478	
2	Maintenance/Monitoring	Site Preparation	9/2/2019	6/30/2023	5	1000	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mowing/Clearing/Grubbing	Dumpers/Tenders	5	8.00	16	0.38
Mowing/Clearing/Grubbing	Excavators	2	8.00	158	0.38

Mowing/Clearing/Grubbing	Off-Highway Trucks	0	8.00	402	0.38
Mowing/Clearing/Grubbing	Other Construction Equipment	6	8.00	88	0.34
Mowing/Clearing/Grubbing	Rubber Tired Dozers	0	8.00	247	0.40
Mowing/Clearing/Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Mowing/Clearing/Grubbing	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Maintenance/Monitoring	Cranes	0	7.00	231	0.29
Maintenance/Monitoring	Forklifts	0	8.00	89	0.20
Maintenance/Monitoring	Generator Sets	0	8.00	84	0.74
Maintenance/Monitoring	Off-Highway Trucks	0	4.00	402	0.38
Maintenance/Monitoring	Rubber Tired Dozers	0	8.00	247	0.40
Maintenance/Monitoring	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Maintenance/Monitoring	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mowing/Clearing/Grubbing	16	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Maintenance/Monitoring	0	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Mowing/Clearing/Grubbing - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	1.1283	23.4085	30.9542	0.0496		1.2733	1.2733		1.2733	1.2733	0.0000	4,852.1448	4,852.1448	1.4715		4,888.9315
Total	1.1283	23.4085	30.9542	0.0496	12.0442	1.2733	13.3175	6.6205	1.2733	7.8938	0.0000	4,852.1448	4,852.1448	1.4715		4,888.9315

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.7900e-003	0.2296	0.0566	5.1000e-004	0.0128	1.5200e-003	0.0143	3.6800e-003	1.4600e-003	5.1400e-003		54.9024	54.9024	3.6900e-003		54.9948
Worker	0.0486	0.0340	0.4479	1.1900e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		118.0362	118.0362	3.7000e-003		118.1286
Total	0.0563	0.2636	0.5045	1.7000e-003	0.1246	2.3900e-003	0.1270	0.0333	2.2700e-003	0.0356		172.9386	172.9386	7.3900e-003		173.1234

3.2 Mowing/Clearing/Grubbing - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	1.1283	23.4085	30.9542	0.0497		1.2733	1.2733		1.2733	1.2733	0.0000	4,755.5186	4,755.5186	1.4722		4,792.3234
Total	1.1283	23.4085	30.9542	0.0497	12.0442	1.2733	13.3175	6.6205	1.2733	7.8938	0.0000	4,755.5186	4,755.5186	1.4722		4,792.3234

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.6400e-003	0.2106	0.0512	5.1000e-004	0.0128	1.0400e-003	0.0138	3.6800e-003	1.0000e-003	4.6800e-003		54.5583	54.5583	3.4900e-003		54.6456
Worker	0.0449	0.0303	0.4076	1.1500e-003	0.1118	8.5000e-004	0.1126	0.0296	7.9000e-004	0.0304		114.3836	114.3836	3.3000e-003		114.4660
Total	0.0515	0.2410	0.4588	1.6600e-003	0.1246	1.8900e-003	0.1265	0.0333	1.7900e-003	0.0351		168.9419	168.9419	6.7900e-003		169.1116

3.2 Mowing/Clearing/Grubbing - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	1.1283	23.4085	30.9542	0.0497		1.2733	1.2733		1.2733	1.2733	0.0000	4,756.0029	4,756.0029	1.4724		4,792.8116
Total	1.1283	23.4085	30.9542	0.0497	12.0442	1.2733	13.3175	6.6205	1.2733	7.8938	0.0000	4,756.0029	4,756.0029	1.4724		4,792.8116

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.6300e-003	0.1915	0.0465	5.1000e-004	0.0128	3.9000e-004	0.0132	3.6800e-003	3.7000e-004	4.0600e-003		54.1488	54.1488	3.3500e-003		54.2325
Worker	0.0419	0.0273	0.3755	1.1100e-003	0.1118	8.3000e-004	0.1126	0.0296	7.6000e-004	0.0304		110.6898	110.6898	2.9800e-003		110.7644
Total	0.0475	0.2188	0.4220	1.6200e-003	0.1246	1.2200e-003	0.1258	0.0333	1.1300e-003	0.0345		164.8386	164.8386	6.3300e-003		164.9969

3.3 Maintenance/Monitoring - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.8500e-003	3.4000e-003	0.0448	1.2000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.8036	11.8036	3.7000e-004		11.8129
Total	4.8500e-003	3.4000e-003	0.0448	1.2000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.8036	11.8036	3.7000e-004		11.8129

3.3 Maintenance/Monitoring - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.4900e-003	3.0300e-003	0.0408	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.4384	11.4384	3.3000e-004		11.4466
Total	4.4900e-003	3.0300e-003	0.0408	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.4384	11.4384	3.3000e-004		11.4466

3.3 Maintenance/Monitoring - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.1900e-003	2.7300e-003	0.0376	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.0690	11.0690	3.0000e-004		11.0764
Total	4.1900e-003	2.7300e-003	0.0376	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.0690	11.0690	3.0000e-004		11.0764

3.3 Maintenance/Monitoring - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.9300e-003	2.4700e-003	0.0347	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.6726	10.6726	2.7000e-004		10.6794
Total	3.9300e-003	2.4700e-003	0.0347	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.6726	10.6726	2.7000e-004		10.6794

3.3 Maintenance/Monitoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.6900e-003	2.2300e-003	0.0321	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.2751	10.2751	2.4000e-004		10.2812
Total	3.6900e-003	2.2300e-003	0.0321	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.2751	10.2751	2.4000e-004		10.2812

Arundo Removal - South Coast Air Basin, Winter

**Arundo Removal - Mitigated
South Coast Air Basin, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	640.00	User Defined Unit	640.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Arundo Removal along Santa Ana River
- Construction Phase - Project-Specific Schedule
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment - Project-Specific Equipment
- Trips and VMT - Project-Specific Daily Maximum. Off-Highway Trucks included as Vendor Trucks
- Demolition -
- Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	420.00	478.00
tblConstructionPhase	NumDays	420.00	1,000.00
tblLandUse	LotAcreage	0.00	640.00
tblOffRoadEquipment	HorsePower	172.00	88.00
tblOffRoadEquipment	LoadFactor	0.42	0.34
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	40.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	1.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.1950	23.6795	31.4646	0.0514	12.1799	1.2758	13.4558	6.6567	1.2757	7.9324	0.0000	5,027.3610	5,027.3610	1.4792	0.0000	5,064.3419
2020	1.1895	23.6557	31.4175	0.0514	12.1799	1.2753	13.4553	6.6567	1.2752	7.9320	0.0000	4,926.6078	4,926.6078	1.4793	0.0000	4,963.5907
2021	1.1849	23.6326	31.3798	0.0513	12.1799	1.2746	13.4546	6.6567	1.2746	7.9313	0.0000	4,922.8743	4,922.8743	1.4790	0.0000	4,959.8492
2022	4.3400e-003	2.7100e-003	0.0314	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	10.0098	10.0098	2.5000e-004	0.0000	10.0161
2023	4.0900e-003	2.4500e-003	0.0289	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	9.6369	9.6369	2.3000e-004	0.0000	9.6426
Maximum	1.1950	23.6795	31.4646	0.0514	12.1799	1.2758	13.4558	6.6567	1.2757	7.9324	0.0000	5,027.3610	5,027.3610	1.4793	0.0000	5,064.3419

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mowing/Clearing/Grubbing	Site Preparation	9/2/2019	6/30/2021	5	478	
2	Maintenance/Monitoring	Site Preparation	9/2/2019	6/30/2023	5	1000	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mowing/Clearing/Grubbing	Dumpers/Tenders	5	8.00	16	0.38
Mowing/Clearing/Grubbing	Excavators	2	8.00	158	0.38
Mowing/Clearing/Grubbing	Off-Highway Trucks	0	8.00	402	0.38
Mowing/Clearing/Grubbing	Other Construction Equipment	6	8.00	88	0.34
Mowing/Clearing/Grubbing	Rubber Tired Dozers	0	8.00	247	0.40

Mowing/Clearing/Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Mowing/Clearing/Grubbing	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Maintenance/Monitoring	Cranes	0	7.00	231	0.29
Maintenance/Monitoring	Forklifts	0	8.00	89	0.20
Maintenance/Monitoring	Generator Sets	0	8.00	84	0.74
Maintenance/Monitoring	Off-Highway Trucks	0	4.00	402	0.38
Maintenance/Monitoring	Rubber Tired Dozers	0	8.00	247	0.40
Maintenance/Monitoring	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Maintenance/Monitoring	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mowing/Clearing/Grubbing	16	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Maintenance/Monitoring	0	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Mowing/Clearing/Grubbing - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	1.1283	23.4085	30.9542	0.0496		1.2733	1.2733		1.2733	1.2733	0.0000	4,852.1448	4,852.1448	1.4715		4,888.9315
Total	1.1283	23.4085	30.9542	0.0496	12.0442	1.2733	13.3175	6.6205	1.2733	7.8938	0.0000	4,852.1448	4,852.1448	1.4715		4,888.9315

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.1300e-003	0.2299	0.0627	5.0000e-004	0.0128	1.5500e-003	0.0143	3.6800e-003	1.4800e-003	5.1600e-003		53.4278	53.4278	3.9500e-003			53.5266
Worker	0.0533	0.0373	0.4070	1.1100e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		110.7167	110.7167	3.4700e-003			110.8035
Total	0.0615	0.2672	0.4697	1.6100e-003	0.1246	2.4200e-003	0.1270	0.0333	2.2900e-003	0.0356		164.1445	164.1445	7.4200e-003			164.3301

3.2 Mowing/Clearing/Grubbing - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000	
Off-Road	1.1283	23.4085	30.9542	0.0497		1.2733	1.2733		1.2733	1.2733	0.0000	4,755.5186	4,755.5186	1.4722			4,792.3234
Total	1.1283	23.4085	30.9542	0.0497	12.0442	1.2733	13.3175	6.6205	1.2733	7.8938	0.0000	4,755.5186	4,755.5186	1.4722			4,792.3234

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	6.9400e-003	0.2106	0.0568	5.0000e-004	0.0128	1.0600e-003	0.0139	3.6800e-003	1.0100e-003	4.7000e-003		53.0755	53.0755	3.7300e-003			53.1688
Worker	0.0493	0.0333	0.3696	1.0800e-003	0.1118	8.5000e-004	0.1126	0.0296	7.9000e-004	0.0304		107.2851	107.2851	3.0900e-003			107.3623
Total	0.0563	0.2439	0.4264	1.5800e-003	0.1246	1.9100e-003	0.1265	0.0333	1.8000e-003	0.0351		160.3606	160.3606	6.8200e-003			160.5311

3.2 Mowing/Clearing/Grubbing - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	1.1283	23.4085	30.9542	0.0497		1.2733	1.2733		1.2733	1.2733	0.0000	4,756.0029	4,756.0029	1.4724		4,792.8116
Total	1.1283	23.4085	30.9542	0.0497	12.0442	1.2733	13.3175	6.6205	1.2733	7.8938	0.0000	4,756.0029	4,756.0029	1.4724		4,792.8116

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9100e-003	0.1911	0.0517	4.9000e-004	0.0128	4.0000e-004	0.0132	3.6800e-003	3.9000e-004	4.0700e-003		52.6748	52.6748	3.5800e-003		52.7642
Worker	0.0461	0.0300	0.3399	1.0400e-003	0.1118	8.3000e-004	0.1126	0.0296	7.6000e-004	0.0304		103.8151	103.8151	2.7900e-003		103.8849
Total	0.0520	0.2211	0.3916	1.5300e-003	0.1246	1.2300e-003	0.1258	0.0333	1.1500e-003	0.0345		156.4899	156.4899	6.3700e-003		156.6491

3.3 Maintenance/Monitoring - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	5.3300e-003	3.7300e-003	0.0407	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.0717	11.0717	3.5000e-004			11.0804
Total	5.3300e-003	3.7300e-003	0.0407	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.0717	11.0717	3.5000e-004			11.0804

3.3 Maintenance/Monitoring - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000	
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	4.9300e-003	3.3300e-003	0.0370	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.7285	10.7285	3.1000e-004			10.7362
Total	4.9300e-003	3.3300e-003	0.0370	1.1000e-004	0.0112	9.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.7285	10.7285	3.1000e-004			10.7362

3.3 Maintenance/Monitoring - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.6100e-003	3.0000e-003	0.0340	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.3815	10.3815	2.8000e-004		10.3885
Total	4.6100e-003	3.0000e-003	0.0340	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.3815	10.3815	2.8000e-004		10.3885

3.3 Maintenance/Monitoring - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	4.3400e-003	2.7100e-003	0.0314	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.0098	10.0098	2.5000e-004			10.0161
Total	4.3400e-003	2.7100e-003	0.0314	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		10.0098	10.0098	2.5000e-004			10.0161

3.3 Maintenance/Monitoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000	
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	4.0900e-003	2.4500e-003	0.0289	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		9.6369	9.6369	2.3000e-004			9.6426
Total	4.0900e-003	2.4500e-003	0.0289	1.0000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	7.0000e-005	3.0400e-003		9.6369	9.6369	2.3000e-004			9.6426

Cannon Pump Station

SARCCUP
Canyon Pump Station
Mitigated

Maximum Day

Phase	On-Site						Off-Site						Maximum Total					
	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Decommissioning (2020)	0.2677	5.5533	8.253	0.0109	0.3221	0.3219	0.1618	1.2497	1.3025	0.0057	0.3596	0.1024	0.4295	6.803	9.5555	0.0166	0.6817	0.4243
Decommissioning (2021)	0.2677	5.5533	8.253	0.0109	0.3221	0.3219	0.148	1.1336	1.1962	0.00558	0.3555	0.0988	0.4157	6.6869	9.4492	0.01648	0.6776	0.4207
Decommissioning (2022)	0.2677	5.5533	8.253	0.0109	0.3221	0.3219	0.1392	1.0724	1.1119	0.00546	0.3552	0.0985	0.4069	6.6257	9.3649	0.01636	0.6773	0.4204
Decommissioning (2023)	0.2677	5.5533	8.253	0.0109	0.3221	0.3219	0.1251	0.8161	1.0217	0.00527	0.3554	0.0977	0.3928	6.3694	9.2747	0.01617	0.6775	0.4196
Excavation and Shoring (2020)	0.6718	13.4549	18.6439	0.0274	0.8396	0.7523	0.0104	0.316	0.0852	0.00077	0.0208	0.00705	0.6822	13.7709	18.7291	0.02817	0.8604	0.75935
Excavation and Shoring (2021)	0.6718	13.4549	18.6439	0.0274	0.8396	0.7523	0.00887	0.2873	0.0776	0.00076	0.0198	0.0061	0.68067	13.7422	18.7215	0.02816	0.8594	0.7584
Excavation and Shoring (2022)	0.6718	13.4549	18.6439	0.0274	0.8396	0.7523	0.00832	0.2729	0.0735	0.00075	0.0197	0.00603	0.68012	13.7278	18.7174	0.02815	0.8593	0.75833
Excavation and Shoring (2023)	0.6718	13.4549	18.6439	0.0274	0.8396	0.7523	0.00618	0.2057	0.0651	0.00073	0.0194	0.00576	0.67798	13.6606	18.709	0.02813	0.859	0.75806
Building Construction (2020)	0.4804	7.0326	9.4475	0.0139	0.3616	0.3616	0.0104	0.316	0.0852	0.00077	0.0208	0.00705	0.4908	7.3486	9.5327	0.01467	0.3824	0.36865
Building Construction (2021)	0.4607	7.0014	9.4234	0.0139	0.3552	0.3552	0.00887	0.2873	0.0776	0.00076	0.0198	0.0061	0.46957	7.2887	9.501	0.01466	0.375	0.3613
Building Construction (2022)	0.4477	6.9784	9.4119	0.0139	0.3501	0.3501	0.00832	0.2729	0.0735	0.00075	0.0197	0.00603	0.45602	7.2513	9.4854	0.01465	0.3698	0.35613
Building Construction (2023)	0.4366	6.9572	9.403	0.0139	0.3457	0.3457	0.00618	0.2057	0.0651	0.00073	0.0194	0.00576	0.44278	7.1629	9.4681	0.01463	0.3651	0.35146
Pipeline Installation (2020)	0.4907	7.3113	9.7653	0.0152	0.3863	0.3863	0.0104	0.316	0.0852	0.00077	0.0208	0.00705	0.5011	7.6273	9.8505	0.01597	0.4071	0.39335
Pipeline Installation (2021)	0.471	7.2801	9.7412	0.0152	0.3799	0.3799	0.00887	0.2873	0.0776	0.00076	0.0198	0.0061	0.47987	7.5674	9.8188	0.01596	0.3997	0.386
Pipeline Installation (2022)	0.458	7.2571	9.7297	0.0152	0.3748	0.3748	0.00832	0.2729	0.0735	0.00075	0.0197	0.00603	0.46632	7.53	9.8032	0.01595	0.3945	0.38083
Pipeline Installation (2023)	0.4469	7.2359	9.7208	0.0152	0.3704	0.3704	0.00618	0.2057	0.0651	0.00073	0.0194	0.00576	0.45308	7.4416	9.7859	0.01593	0.3898	0.37616
Street Restoration (2023)	0.09	1.8516	2.7734	0.00366	0.1054	0.1054	0	0	0	0	0	0	0.09	1.8516	2.7734	0.00366	0.1054	0.1054

Localized Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2020)	1.9106	33.3521	46.1097	0.0674	1.9096	1.8221
All Phases (2021)	1.8712	33.2897	46.0615	0.0674	1.8968	1.8093
All Phases (2022)	1.8452	33.2437	46.0385	0.0674	1.8866	1.7991
All Phases (2023)	1.913	35.0529	48.7941	0.07106	1.9832	1.8957
Maximum	1.913	35.0529	48.7941	0.07106	1.9832	1.8957

SCAQMD LST Threshold (SRA 23)

2 Acres at 25 Meters	N/A	170	883	N/A	7	4
Exceeds Threshold?	N/A	No	No	N/A	No	No

Regional Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2020)	2.1036	35.5498	47.6678	0.07541	2.3316	1.94565
All Phases (2021)	2.04581	35.2852	47.4905	0.07526	2.3117	1.9264
All Phases (2022)	2.00936	35.1348	47.3709	0.07511	2.3009	1.91569
All Phases (2023)	2.05664	36.4861	50.0111	0.07852	2.3968	2.01068
Maximum	2.1036	36.4861	50.0111	0.07852	2.3968	2.01068
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

SARCCUP: Canyon Pump Station - South Coast Air Basin, Summer

SARCCUP: Cannon Pump Station - Mitigated
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	5,000.00	User Defined Unit	2.90	5,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Assume approximately 5,000 SF Pump Station

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading - Assume 0.25 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	848.00
tblConstructionPhase	NumDays	6.00	848.00
tblConstructionPhase	NumDays	220.00	848.00
tblConstructionPhase	NumDays	10.00	45.00
tblGrading	AcresOfGrading	0.00	200.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	5,000.00
tblLandUse	LotAcreage	0.00	2.90

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	HaulingTripNumber	2.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	11.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	1.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	25.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.0893	35.5426	47.6428	0.0753	0.5073	1.8241	2.3314	0.1220	1.8235	1.9455	0.0000	7,283.0728	7,283.0728	1.8466	0.0000	7,329.2368
2021	2.0323	35.2809	47.4670	0.0752	0.5069	1.8048	2.3117	0.1219	1.8044	1.9263	0.0000	7,269.9987	7,269.9987	1.8360	0.0000	7,315.8978
2022	1.9964	35.1317	47.3487	0.0750	0.5069	1.7940	2.3009	0.1219	1.7937	1.9156	0.0000	7,256.1925	7,256.1925	1.8290	0.0000	7,301.9170
2023	2.0445	36.4848	49.9947	0.0785	0.5082	1.8887	2.3969	0.1222	1.8885	2.0107	0.0000	7,585.7011	7,585.7011	1.9336	0.0000	7,634.0407
Maximum	2.0893	36.4848	49.9947	0.0785	0.5082	1.8887	2.3969	0.1222	1.8885	2.0107	0.0000	7,585.7011	7,585.7011	1.9336	0.0000	7,634.0407

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Decomissioning	Demolition	4/1/2020	6/30/2023	5	848	
2	Excavation and Shoring	Grading	4/1/2020	6/30/2023	5	848	
3	Pipeline Installation	Trenching	4/1/2020	6/30/2023	5	848	
4	Building Construction	Building Construction	4/1/2020	6/30/2023	5	848	
5	Street Restoration	Paving	5/1/2023	6/30/2023	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Decomissioning	Concrete/Industrial Saws	0	8.00	81	0.73
Decomissioning	Excavators	1	4.00	158	0.38
Decomissioning	Graders	0	8.00	187	0.41
Decomissioning	Off-Highway Trucks	0	6.00	402	0.38
Decomissioning	Other Construction Equipment	1	2.00	172	0.42
Decomissioning	Pavers	1	4.00	130	0.42
Decomissioning	Rollers	1	4.00	80	0.38
Decomissioning	Rubber Tired Dozers	0	8.00	247	0.40
Decomissioning	Scrapers	0	8.00	367	0.48
Decomissioning	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38
Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	7.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Off-Highway Trucks	0	6.00	402	0.38

Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Decommissioning	6	25.00	11.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Decommissioning - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.2677	5.5533	8.2530	0.0109		0.3219	0.3219		0.3219	0.3219	0.0000	1,055.1980	1,055.1980	0.3413		1,063.7298
Total	0.2677	5.5533	8.2530	0.0109	2.3000e-004	0.3219	0.3221	3.0000e-005	0.3219	0.3219	0.0000	1,055.1980	1,055.1980	0.3413		1,063.7298

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	2.3000e-004	8.2100e-003	1.7100e-003	2.0000e-005	1.8000e-003	3.0000e-005	1.8300e-003	4.6000e-004	3.0000e-005	4.8000e-004		2.4835	2.4835	1.8000e-004		2.4879
Vendor	0.0365	1.1585	0.2818	2.8100e-003	0.0704	5.7400e-003	0.0761	0.0203	5.4900e-003	0.0258		300.0704	300.0704	0.0192		300.5506
Worker	0.1121	0.0758	1.0190	2.8700e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		285.9591	285.9591	8.2400e-003		286.1651
Total	0.1489	1.2426	1.3025	5.7000e-003	0.3516	7.9000e-003	0.3595	0.0948	7.4800e-003	0.1023		588.5130	588.5130	0.0276		589.2036

3.2 Decommissioning - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.2677	5.5533	8.2530	0.0109		0.3219	0.3219		0.3219	0.3219	0.0000	1,055.2020	1,055.2020	0.3413		1,063.7339
Total	0.2677	5.5533	8.2530	0.0109	2.3000e-004	0.3219	0.3221	3.0000e-005	0.3219	0.3219	0.0000	1,055.2020	1,055.2020	0.3413		1,063.7339

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2000e-004	7.6400e-003	1.6900e-003	2.0000e-005	1.3900e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4566	2.4566	1.7000e-004		2.4609
Vendor	0.0310	1.0534	0.2558	2.7800e-003	0.0704	2.1500e-003	0.0725	0.0203	2.0600e-003	0.0223		297.8181	297.8181	0.0184		298.2785
Worker	0.1046	0.0682	0.9387	2.7800e-003	0.2794	2.0700e-003	0.2815	0.0741	1.9000e-003	0.0760		276.7246	276.7246	7.4600e-003		276.9110
Total	0.1358	1.1293	1.1962	5.5800e-003	0.3512	4.2400e-003	0.3555	0.0947	3.9800e-003	0.0987		576.9993	576.9993	0.0261		577.6504

3.2 Decommissioning - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000				0.0000
Off-Road	0.2677	5.5533	8.2530	0.0109		0.3219	0.3219		0.3219	0.3219	0.0000	1,055.5103	1,055.5103	0.3414			1,064.0446
Total	0.2677	5.5533	8.2530	0.0109	2.3000e-004	0.3219	0.3221	3.0000e-005	0.3219	0.3219	0.0000	1,055.5103	1,055.5103	0.3414			1,064.0446

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	2.1000e-004	7.0800e-003	1.6700e-003	2.0000e-005	1.4000e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4273	2.4273	1.7000e-004			2.4316
Vendor	0.0290	1.0006	0.2422	2.7600e-003	0.0704	1.8700e-003	0.0723	0.0203	1.7900e-003	0.0221		295.2073	295.2073	0.0178			295.6518
Worker	0.0982	0.0617	0.8680	2.6800e-003	0.2794	2.0100e-003	0.2815	0.0741	1.8500e-003	0.0760		266.8158	266.8158	6.7400e-003			266.9844
Total	0.1274	1.0693	1.1119	5.4600e-003	0.3512	3.9000e-003	0.3551	0.0947	3.6600e-003	0.0984		564.4503	564.4503	0.0247			565.0677

3.2 Decommissioning - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000				0.0000
Off-Road	0.2677	5.5533	8.2530	0.0109		0.3219	0.3219		0.3219	0.3219	0.0000	1,055.8572	1,055.8572	0.3415			1,064.3944
Total	0.2677	5.5533	8.2530	0.0109	2.3000e-004	0.3219	0.3221	3.0000e-005	0.3219	0.3219	0.0000	1,055.8572	1,055.8572	0.3415			1,064.3944

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.5600e-003	1.5200e-003	2.0000e-005	2.6700e-003	1.0000e-005	2.6800e-003	6.7000e-004	1.0000e-005	6.8000e-004		2.3277	2.3277	1.6000e-004		2.3317
Vendor	0.0215	0.7543	0.2186	2.6700e-003	0.0704	8.6000e-004	0.0713	0.0203	8.3000e-004	0.0211		286.0401	286.0401	0.0157		286.4331
Worker	0.0923	0.0558	0.8016	2.5800e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8000e-003	0.0759		256.8775	256.8775	6.0800e-003		257.0295
Total	0.1140	0.8147	1.0217	5.2700e-003	0.3525	2.8300e-003	0.3553	0.0950	2.6400e-003	0.0977		545.2453	545.2453	0.0220		545.7944

3.3 Excavation and Shoring - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618
Total	0.6718	13.4549	18.6439	0.0274	0.0979	0.7417	0.8396	0.0106	0.7417	0.7523	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003		81.9684
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003		81.9684

3.3 Excavation and Shoring - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654
Total	0.6718	13.4549	18.6439	0.0274	0.0979	0.7417	0.8396	0.0106	0.7417	0.7523	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003		81.3487
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003		81.3487

3.3 Excavation and Shoring - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456
Total	0.6718	13.4549	18.6439	0.0274	0.0979	0.7417	0.8396	0.0106	0.7417	0.7523	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003		80.6323
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003		80.6323

3.3 Excavation and Shoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393
Total	0.6718	13.4549	18.6439	0.0274	0.0979	0.7417	0.8396	0.0106	0.7417	0.7523	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181

3.4 Pipeline Installation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4907	7.3113	9.7653	0.0152		0.3863	0.3863		0.3863	0.3863	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710
Total	0.4907	7.3113	9.7653	0.0152		0.3863	0.3863		0.3863	0.3863	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003		81.9684
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003		81.9684

3.4 Pipeline Installation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4710	7.2801	9.7412	0.0152		0.3799	0.3799		0.3799	0.3799	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138
Total	0.4710	7.2801	9.7412	0.0152		0.3799	0.3799		0.3799	0.3799	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003			81.3487
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003			81.3487

3.4 Pipeline Installation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.4580	7.2571	9.7297	0.0152		0.3748	0.3748		0.3748	0.3748	0.0000	1,438.8860	1,438.8860	0.3153			1,446.7685
Total	0.4580	7.2571	9.7297	0.0152		0.3748	0.3748		0.3748	0.3748	0.0000	1,438.8860	1,438.8860	0.3153			1,446.7685

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003			80.6323
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003			80.6323

3.4 Pipeline Installation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4469	7.2359	9.7208	0.0152		0.3704	0.3704		0.3704	0.3704	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390
Total	0.4469	7.2359	9.7208	0.0152		0.3704	0.3704		0.3704	0.3704	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003		78.1181

3.5 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4804	7.0326	9.4475	0.0139		0.3616	0.3616		0.3616	0.3616	0.0000	1,323.7180	1,323.7180	0.4099		1,333.9655
Total	0.4804	7.0326	9.4475	0.0139		0.3616	0.3616		0.3616	0.3616	0.0000	1,323.7180	1,323.7180	0.4099		1,333.9655

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003			81.9684
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	9.9600e-003	0.3160	0.0769	7.7000e-004	0.0192	1.5600e-003	0.0208	5.5300e-003	1.5000e-003	7.0200e-003		81.8374	81.8374	5.2400e-003			81.9684

3.5 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.4607	7.0014	9.4234	0.0139		0.3552	0.3552		0.3552	0.3552	0.0000	1,323.8850	1,323.8850	0.4081			1,334.0882
Total	0.4607	7.0014	9.4234	0.0139		0.3552	0.3552		0.3552	0.3552	0.0000	1,323.8850	1,323.8850	0.4081			1,334.0882

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003			81.3487
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	8.4400e-003	0.2873	0.0698	7.6000e-004	0.0192	5.9000e-004	0.0198	5.5300e-003	5.6000e-004	6.0900e-003		81.2231	81.2231	5.0200e-003			81.3487

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4477	6.9784	9.4119	0.0139		0.3501	0.3501		0.3501	0.3501	0.0000	1,324.1159	1,324.1159	0.4071		1,334.2935
Total	0.4477	6.9784	9.4119	0.0139		0.3501	0.3501		0.3501	0.3501	0.0000	1,324.1159	1,324.1159	0.4071		1,334.2935

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003		80.6323
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	7.9200e-003	0.2729	0.0661	7.5000e-004	0.0192	5.1000e-004	0.0197	5.5300e-003	4.9000e-004	6.0100e-003		80.5111	80.5111	4.8500e-003		80.6323

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4366	6.9572	9.4030	0.0139		0.3457	0.3457		0.3457	0.3457	0.0000	1,324.5354	1,324.5354	0.4062		1,334.6891
Total	0.4366	6.9572	9.4030	0.0139		0.3457	0.3457		0.3457	0.3457	0.0000	1,324.5354	1,324.5354	0.4062		1,334.6891

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003			78.1181
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	5.8700e-003	0.2057	0.0596	7.3000e-004	0.0192	2.4000e-004	0.0194	5.5300e-003	2.3000e-004	5.7500e-003		78.0109	78.0109	4.2900e-003			78.1181

3.6 Street Restoration - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6625	354.6625	0.1147			357.5301
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6625	354.6625	0.1147			357.5301

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

SARCCUP: Canyon Pump Station - South Coast Air Basin, Winter

SARCCUP: Canyon Pump Station - Mitigated
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	5,000.00	User Defined Unit	2.90	5,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Assume approximately 5,000 SF Pump Station

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading - Assume 0.25 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	848.00
tblConstructionPhase	NumDays	6.00	848.00
tblConstructionPhase	NumDays	220.00	848.00
tblConstructionPhase	NumDays	10.00	45.00
tblGrading	AcresOfGrading	0.00	200.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	5,000.00
tblLandUse	LotAcreage	0.00	2.90

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	HaulingTripNumber	2.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	11.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	1.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	25.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.1036	35.5494	47.6033	0.0750	0.5073	1.8243	2.3316	0.1220	1.8236	1.9457	0.0000	7,250.4563	7,250.4563	1.8485	0.0000	7,296.6674
2021	2.0458	35.2832	47.4301	0.0749	0.5069	1.8049	2.3118	0.1219	1.8045	1.9264	0.0000	7,238.0298	7,238.0298	1.8378	0.0000	7,283.9747
2022	2.0094	35.1322	47.3144	0.0747	0.5069	1.7941	2.3010	0.1219	1.7938	1.9157	0.0000	7,224.8831	7,224.8831	1.8307	0.0000	7,270.6517
2023	2.0565	36.4829	49.9529	0.0782	0.5082	1.8888	2.3970	0.1222	1.8886	2.0108	0.0000	7,555.6940	7,555.6940	1.9349	0.0000	7,604.0671
Maximum	2.1036	36.4829	49.9529	0.0782	0.5082	1.8888	2.3970	0.1222	1.8886	2.0108	0.0000	7,555.6940	7,555.6940	1.9349	0.0000	7,604.0671

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Decomissioning	Demolition	4/1/2020	6/30/2023	5	848	
2	Excavation and Shoring	Grading	4/1/2020	6/30/2023	5	848	
3	Pipeline Installation	Trenching	4/1/2020	6/30/2023	5	848	
4	Building Construction	Building Construction	4/1/2020	6/30/2023	5	848	
5	Street Restoration	Paving	5/1/2023	6/30/2023	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Decomissioning	Concrete/Industrial Saws	0	8.00	81	0.73
Decomissioning	Excavators	1	4.00	158	0.38
Decomissioning	Graders	0	8.00	187	0.41
Decomissioning	Off-Highway Trucks	0	6.00	402	0.38
Decomissioning	Other Construction Equipment	1	2.00	172	0.42
Decomissioning	Pavers	1	4.00	130	0.42
Decomissioning	Rollers	1	4.00	80	0.38
Decomissioning	Rubber Tired Dozers	0	8.00	247	0.40
Decomissioning	Scrapers	0	8.00	367	0.48
Decomissioning	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38
Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	7.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Off-Highway Trucks	0	6.00	402	0.38

Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Decommissioning	6	25.00	11.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Decommissioning - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.2677	5.5533	8.2530	0.0109		0.3219	0.3219		0.3219	0.3219	0.0000	1,055.1980	1,055.1980	0.3413		1,063.7298
Total	0.2677	5.5533	8.2530	0.0109	2.3000e-004	0.3219	0.3221	3.0000e-005	0.3219	0.3219	0.0000	1,055.1980	1,055.1980	0.3413		1,063.7298

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4000e-004	8.3200e-003	1.8200e-003	2.0000e-005	1.8000e-003	3.0000e-005	1.8300e-003	4.6000e-004	3.0000e-005	4.8000e-004		2.4411	2.4411	1.8000e-004		2.4456
Vendor	0.0382	1.1581	0.3123	2.7300e-003	0.0704	5.8200e-003	0.0762	0.0203	5.5700e-003	0.0258		291.9151	291.9151	0.0205		292.4283
Worker	0.1234	0.0833	0.9240	2.6900e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		268.2128	268.2128	7.7200e-003		268.4058
Total	0.1618	1.2497	1.2381	5.4400e-003	0.3516	7.9800e-003	0.3596	0.0948	7.5600e-003	0.1024		562.5690	562.5690	0.0284		563.2798

3.2 Decommissioning - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.2677	5.5533	8.2530	0.0109		0.3219	0.3219		0.3219	0.3219	0.0000	1,055.2020	1,055.2020	0.3413		1,063.7339
Total	0.2677	5.5533	8.2530	0.0109	2.3000e-004	0.3219	0.3221	3.0000e-005	0.3219	0.3219	0.0000	1,055.2020	1,055.2020	0.3413		1,063.7339

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.3000e-004	7.7400e-003	1.8000e-003	2.0000e-005	1.3900e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.4144	2.4144	1.8000e-004		2.4189
Vendor	0.0325	1.0510	0.2843	2.7100e-003	0.0704	2.2200e-003	0.0726	0.0203	2.1200e-003	0.0224		289.7112	289.7112	0.0197		290.2032
Worker	0.1153	0.0749	0.8497	2.6000e-003	0.2794	2.0700e-003	0.2815	0.0741	1.9000e-003	0.0760		259.5378	259.5378	6.9800e-003		259.7123
Total	0.1480	1.1336	1.1358	5.3300e-003	0.3512	4.3100e-003	0.3555	0.0947	4.0400e-003	0.0988		551.6633	551.6633	0.0268		552.3344

3.2 Decommissioning - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.2677	5.5533	8.2530	0.0109		0.3219	0.3219		0.3219	0.3219	0.0000	1,055.5103	1,055.5103	0.3414		1,064.0446
Total	0.2677	5.5533	8.2530	0.0109	2.3000e-004	0.3219	0.3221	3.0000e-005	0.3219	0.3219	0.0000	1,055.5103	1,055.5103	0.3414		1,064.0446

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2000e-004	7.1600e-003	1.7800e-003	2.0000e-005	1.4000e-003	2.0000e-005	1.4200e-003	3.6000e-004	2.0000e-005	3.8000e-004		2.3853	2.3853	1.8000e-004		2.3897
Vendor	0.0305	0.9975	0.2693	2.6800e-003	0.0704	1.9300e-003	0.0723	0.0203	1.8500e-003	0.0221		287.1243	287.1243	0.0190		287.5991
Worker	0.1084	0.0677	0.7844	2.5100e-003	0.2794	2.0100e-003	0.2815	0.0741	1.8500e-003	0.0760		250.2447	250.2447	6.3000e-003		250.4023
Total	0.1392	1.0724	1.0554	5.2100e-003	0.3512	3.9600e-003	0.3552	0.0947	3.7200e-003	0.0985		539.7543	539.7543	0.0255		540.3911

3.2 Decommissioning - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.2677	5.5533	8.2530	0.0109		0.3219	0.3219		0.3219	0.3219	0.0000	1,055.8572	1,055.8572	0.3415		1,064.3944
Total	0.2677	5.5533	8.2530	0.0109	2.3000e-004	0.3219	0.3221	3.0000e-005	0.3219	0.3219	0.0000	1,055.8572	1,055.8572	0.3415		1,064.3944

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.5900e-003	1.5900e-003	2.0000e-005	2.6700e-003	1.0000e-005	2.6800e-003	6.7000e-004	1.0000e-005	6.8000e-004		2.2877	2.2877	1.6000e-004		2.2918
Vendor	0.0227	0.7503	0.2388	2.6000e-003	0.0704	9.1000e-004	0.0713	0.0203	8.7000e-004	0.0211		278.3331	278.3331	0.0167		278.7500
Worker	0.1023	0.0612	0.7229	2.4200e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8000e-003	0.0759		240.9232	240.9232	5.6800e-003		241.0652
Total	0.1251	0.8161	0.9634	5.0400e-003	0.3525	2.8800e-003	0.3554	0.0950	2.6800e-003	0.0977		521.5440	521.5440	0.0225		522.1070

3.3 Excavation and Shoring - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618
Total	0.6718	13.4549	18.6439	0.0274	0.0979	0.7417	0.8396	0.0106	0.7417	0.7523	0.0000	2,630.9215	2,630.9215	0.7296		2,649.1618

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003		79.7532
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003		79.7532

3.3 Excavation and Shoring - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654
Total	0.6718	13.4549	18.6439	0.0274	0.0979	0.7417	0.8396	0.0106	0.7417	0.7523	0.0000	2,631.2809	2,631.2809	0.7274		2,649.4654

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003		79.1463
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003		79.1463

3.3 Excavation and Shoring - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456
Total	0.6718	13.4549	18.6439	0.0274	0.0979	0.7417	0.8396	0.0106	0.7417	0.7523	0.0000	2,631.6968	2,631.6968	0.7260		2,649.8456

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361

3.3 Excavation and Shoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0979	0.0000	0.0979	0.0106	0.0000	0.0106			0.0000			0.0000
Off-Road	0.6718	13.4549	18.6439	0.0274		0.7417	0.7417		0.7417	0.7417	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393
Total	0.6718	13.4549	18.6439	0.0274	0.0979	0.7417	0.8396	0.0106	0.7417	0.7523	0.0000	2,632.5423	2,632.5423	0.7239		2,650.6393

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003		76.0227
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003		76.0227

3.4 Pipeline Installation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4907	7.3113	9.7653	0.0152		0.3863	0.3863		0.3863	0.3863	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710
Total	0.4907	7.3113	9.7653	0.0152		0.3863	0.3863		0.3863	0.3863	0.0000	1,439.2101	1,439.2101	0.3224		1,447.2710

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003		79.7532
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003		79.7532

3.4 Pipeline Installation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4710	7.2801	9.7412	0.0152		0.3799	0.3799		0.3799	0.3799	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138
Total	0.4710	7.2801	9.7412	0.0152		0.3799	0.3799		0.3799	0.3799	0.0000	1,438.9622	1,438.9622	0.3181		1,446.9138

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003		79.1463
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003		79.1463

3.4 Pipeline Installation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4580	7.2571	9.7297	0.0152		0.3748	0.3748		0.3748	0.3748	0.0000	1,438.8860	1,438.8860	0.3153		1,446.7685
Total	0.4580	7.2571	9.7297	0.0152		0.3748	0.3748		0.3748	0.3748	0.0000	1,438.8860	1,438.8860	0.3153		1,446.7685

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361

3.4 Pipeline Installation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4469	7.2359	9.7208	0.0152		0.3704	0.3704		0.3704	0.3704	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390
Total	0.4469	7.2359	9.7208	0.0152		0.3704	0.3704		0.3704	0.3704	0.0000	1,438.8255	1,438.8255	0.3125		1,446.6390

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003		76.0227
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003		76.0227

3.5 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4804	7.0326	9.4475	0.0139		0.3616	0.3616		0.3616	0.3616	0.0000	1,323.7180	1,323.7180	0.4099		1,333.9655
Total	0.4804	7.0326	9.4475	0.0139		0.3616	0.3616		0.3616	0.3616	0.0000	1,323.7180	1,323.7180	0.4099		1,333.9655

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003			79.7532
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0104	0.3159	0.0852	7.4000e-004	0.0192	1.5900e-003	0.0208	5.5300e-003	1.5200e-003	7.0500e-003		79.6132	79.6132	5.6000e-003			79.7532

3.5 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.4607	7.0014	9.4234	0.0139		0.3552	0.3552		0.3552	0.3552	0.0000	1,323.8850	1,323.8850	0.4081			1,334.0882
Total	0.4607	7.0014	9.4234	0.0139		0.3552	0.3552		0.3552	0.3552	0.0000	1,323.8850	1,323.8850	0.4081			1,334.0882

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003			79.1463
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	8.8700e-003	0.2866	0.0776	7.4000e-004	0.0192	6.1000e-004	0.0198	5.5300e-003	5.8000e-004	6.1000e-003		79.0121	79.0121	5.3700e-003			79.1463

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4477	6.9784	9.4119	0.0139		0.3501	0.3501		0.3501	0.3501	0.0000	1,324.1159	1,324.1159	0.4071		1,334.2935
Total	0.4477	6.9784	9.4119	0.0139		0.3501	0.3501		0.3501	0.3501	0.0000	1,324.1159	1,324.1159	0.4071		1,334.2935

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	8.3200e-003	0.2721	0.0735	7.3000e-004	0.0192	5.3000e-004	0.0197	5.5300e-003	5.0000e-004	6.0300e-003		78.3066	78.3066	5.1800e-003		78.4361

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4366	6.9572	9.4030	0.0139		0.3457	0.3457		0.3457	0.3457	0.0000	1,324.5354	1,324.5354	0.4062		1,334.6891
Total	0.4366	6.9572	9.4030	0.0139		0.3457	0.3457		0.3457	0.3457	0.0000	1,324.5354	1,324.5354	0.4062		1,334.6891

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003			76.0227
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	6.1800e-003	0.2046	0.0651	7.1000e-004	0.0192	2.5000e-004	0.0194	5.5300e-003	2.4000e-004	5.7600e-003		75.9090	75.9090	4.5500e-003			76.0227

3.6 Street Restoration - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6625	354.6625	0.1147			357.5301
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.0900	1.8516	2.7734	3.6600e-003		0.1054	0.1054		0.1054	0.1054	0.0000	354.6625	354.6625	0.1147			357.5301

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

ID-4 CRA Crossing Refurbishment

SARCCUP
 ID-4 CRA Crossing Refurbishment
 Mitigated

Maximum Day

Phase	On-Site						Off-Site						Maximum Total					
	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Grading (2019)	1.1622	11.4939	7.802	0.0133	1.0302	0.6159	0.1748	1.2717	1.4086	0.00561	0.3556	0.1026	1.337	12.7656	9.2106	0.01891	1.3858	0.7185
Grading (2020)	1.0434	10.3875	7.5583	0.0133	0.9456	0.5375	0.1589	1.1632	1.2807	0.00549	0.3566	0.1011	1.2023	11.5507	8.839	0.01879	1.3022	0.6386

Localized Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
Grading (2019)	1.1622	11.4939	7.802	0.0133	1.0302	0.6159
Grading (2020)	1.0434	10.3875	7.5583	0.0133	0.9456	0.5375
Maximum	1.1622	11.4939	7.802	0.0133	1.0302	0.6159

SCAQMD LST Threshold (SRA 22)

5 Acres at 500 Meters	N/A	778	22490	N/A	228	113
Exceeds Threshold?	N/A	No	No	N/A	No	No

Regional Emissions

Overlapping Phases	ROG	NOX	CO	SO2	PM10	PM2.5
Grading (2019)	1.337	12.7656	9.2106	0.01891	1.3858	0.7185
Grading (2020)	1.2023	11.5507	8.839	0.01879	1.3022	0.6386
Maximum	1.337	12.7656	9.2106	0.01891	1.3858	0.7185
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

SARCCUP: ID-4 CRA Crossing Refurbishment - South Coast Air Basin, Summer

SARCCUP: ID-4 CRA Crossing Refurbishment - Mitigated
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	39.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Grading and Excavation Only
 Construction Phase - Grading and Excavation Only
 Off-road Equipment -
 Off-road Equipment - Project-Specific Equipment
 Off-road Equipment -
 Trips and VMT - Project-Specific Assumptions
 Grading - Assume equivalent of 1 acre graded per day by a backhoe.
 Architectural Coating - Grading and Excavation Only

Construction Off-road Equipment Mitigation - Tier 3 for Equipment >50 HP

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,500.00	0.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	740.00	0.00

tblConstructionPhase	NumDays	50.00	0.00
tblConstructionPhase	NumDays	75.00	260.00
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	30.00	0.00
tblGrading	AcresOfGrading	0.00	260.00
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	39.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	10.00	25.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.6475	8.2835	10.0683	0.0189	0.7591	2.7128	1.1659	0.1378	2.7125	0.5440	0.0000	1,867.8174	1,867.8174	0.4210	0.0000	1,878.3419
2020	0.6109	8.1514	9.9203	0.0188	0.7627	0.3979	1.1606	0.1386	0.3975	0.5362	0.0000	1,830.9159	1,830.9159	0.4169	0.0000	1,841.3379
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.7056	0.0000	0.0000	0.7055	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.6475	8.2835	10.0683	0.0189	0.7627	2.7128	1.1659	0.1386	2.7125	0.5440	0.0000	1,867.8174	1,867.8174	0.4210	0.0000	1,878.3419

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	3/31/2019	5	0	
2	Grading	Grading	4/1/2019	3/27/2020	5	260	
3	Site Preparation	Site Preparation	6/8/2019	6/7/2019	5	0	
4	Building Construction	Building Construction	11/2/2019	11/1/2019	5	0	
5	Paving	Paving	9/3/2022	9/2/2022	5	0	
6	Architectural Coating	Architectural Coating	11/19/2022	11/18/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 260

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Cranes	1	8.00	231	0.29
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Welders	1	4.00	46	0.45
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	0.4863	7.0220	8.6596	0.0133		0.3969	0.3969		0.3969	0.3969	0.0000	1,290.0332	1,290.0332	0.3927		1,299.8500
Total	0.4863	7.0220	8.6596	0.0133	0.4136	0.3969	0.8105	0.0447	0.3969	0.4415	0.0000	1,290.0332	1,290.0332	0.3927		1,299.8500

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.3000e-004	0.0286	5.7300e-003	8.0000e-005	2.0900e-003	1.1000e-004	2.1900e-003	5.6000e-004	1.0000e-004	6.6000e-004		8.1817	8.1817	5.9000e-004		8.1964
Vendor	0.0390	1.1479	0.2831	2.5700e-003	0.0640	7.6100e-003	0.0716	0.0184	7.2800e-003	0.0257		274.5122	274.5122	0.0185		274.9739
Worker	0.1214	0.0849	1.1198	2.9600e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		295.0904	295.0904	9.2500e-003		295.3216
Total	0.1612	1.2615	1.4086	5.6100e-003	0.3455	9.9100e-003	0.3554	0.0931	9.4000e-003	0.1025		577.7843	577.7843	0.0283		578.4919

SARCCUP: ID-4 CRA Crossing Refurbishment - South Coast Air Basin, Winter

SARCCUP: ID-4 CRA Crossing Refurbishment - Mitigated
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	39.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Grading and Excavation Only
 Construction Phase - Grading and Excavation Only
 Off-road Equipment -
 Off-road Equipment - Project-Specific Equipment
 Off-road Equipment -
 Trips and VMT - Project-Specific Assumptions
 Grading - Assume equivalent of 1 acre graded per day by a backhoe.
 Architectural Coating - Grading and Excavation Only

Construction Off-road Equipment Mitigation - Tier 3 for Equipment >50 HP

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,500.00	0.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	740.00	0.00

tblConstructionPhase	NumDays	50.00	0.00
tblConstructionPhase	NumDays	75.00	260.00
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	30.00	0.00
tblGrading	AcresOfGrading	0.00	260.00
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	39.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	10.00	25.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.6611	8.2937	9.9967	0.0186	0.7591	2.7128	1.1660	0.1378	2.7125	0.5441	0.0000	1,842.0081	1,842.0081	0.4217	0.0000	1,852.5510
2020	0.6236	8.1588	9.8533	0.0185	0.7627	0.3980	1.1607	0.1386	0.3976	0.5362	0.0000	1,805.6174	1,805.6174	0.4176	0.0000	1,816.0570
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.7056	0.0000	0.0000	0.7055	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.6611	8.2937	9.9967	0.0186	0.7627	2.7128	1.1660	0.1386	2.7125	0.5441	0.0000	1,842.0081	1,842.0081	0.4217	0.0000	1,852.5510

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	3/31/2019	5	0	
2	Grading	Grading	4/1/2019	3/27/2020	5	260	
3	Site Preparation	Site Preparation	6/8/2019	6/7/2019	5	0	
4	Building Construction	Building Construction	11/2/2019	11/1/2019	5	0	
5	Paving	Paving	9/3/2022	9/2/2022	5	0	
6	Architectural Coating	Architectural Coating	11/19/2022	11/18/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 260

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Cranes	1	8.00	231	0.29
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Welders	1	4.00	46	0.45
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	0.4863	7.0220	8.6596	0.0133		0.3969	0.3969		0.3969	0.3969	0.0000	1,290.0332	1,290.0332	0.3927		1,299.8500
Total	0.4863	7.0220	8.6596	0.0133	0.4136	0.3969	0.8105	0.0447	0.3969	0.4415	0.0000	1,290.0332	1,290.0332	0.3927		1,299.8500

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.5000e-004	0.0290	6.1500e-003	7.0000e-005	2.0900e-003	1.1000e-004	2.2000e-003	5.6000e-004	1.0000e-004	6.6000e-004		8.0442	8.0442	6.1000e-004		8.0594
Vendor	0.0407	1.1493	0.3135	2.5000e-003	0.0640	7.7300e-003	0.0717	0.0184	7.4000e-003	0.0258		267.1389	267.1389	0.0198		267.6328
Worker	0.1333	0.0933	1.0174	2.7800e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		276.7918	276.7918	8.6800e-003		277.0088
Total	0.1748	1.2717	1.3371	5.3500e-003	0.3455	0.0100	0.3556	0.0931	9.5200e-003	0.1026		551.9749	551.9749	0.0290		552.7010

Chino Basin Production Wells, Refurbishment and Treatment System Site

SARCCUP
IEUA Well Site
Mitigated

Maximum Day

Phase	On-Site						Off-Site						Maximum Total					
	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Well Drilling (2019)	0.4031	8.3855	10.285	0.0175	0.4423	0.4423	0.1908	1.7216	1.4604	0.00633	0.3841	0.1128	0.5939	10.1071	11.7454	0.02383	0.8264	0.5551
Well Drilling (2020)	0.4031	8.3855	10.285	0.0175	0.4423	0.4423	0.1725	1.5752	1.3813	0.00649	0.3806	0.1095	0.5756	9.9607	11.6663	0.02399	0.8229	0.5518
Building Construction (2019)	0.1577	2.8707	3.7349	0.00517	0.1926	0.1926	0	0	0	0	0	0	0.1577	2.8707	3.7349	0.00517	0.1926	0.1926
Building Construction (2020)	0.1577	2.8707	3.735	0.00517	0.1925	0.1925	0	0	0	0	0	0	0.1577	2.8707	3.735	0.00517	0.1925	0.1925

Localized Emissions

Overlapping Phases

	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2019)	0.5608	11.2562	14.0199	0.02267	0.6349	0.6349
All Phases (2020)	0.5608	11.2562	14.02	0.02267	0.6348	0.6348
Maximum	0.5608	11.2562	14.02	0.02267	0.6349	0.6349
SCAQMD LST Threshold (SRA 33)						
1 Acre at 25 Meters	N/A	118	863	N/A	5	4
Exceeds Threshold?	N/A	No	No	N/A	No	No

Regional Emissions

Overlapping Phases

	ROG	NOX	CO	SO2	PM10	PM2.5
All Phases (2019)	0.7516	12.9778	15.4803	0.029	1.019	0.7477
All Phases (2020)	0.7333	12.8314	15.4013	0.02916	1.0154	0.7443
Maximum	0.7516	12.9778	15.4803	0.02916	1.019	0.7477
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

SARCCUP: IEUA Well Site - South Coast Air Basin, Summer

SARCCUP: Chino Basin Production Well Site - Mitigated
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1,000.00	User Defined Unit	1.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Extraction Well

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	393.00
tblConstructionPhase	NumDays	1.00	393.00
tblConstructionPhase	PhaseEndDate	8/19/2019	9/30/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	9/30/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	4/1/2019
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.7373	12.9672	15.5399	0.0293	0.3710	0.6478	1.0188	0.1004	0.6472	0.7476	0.0000	2,883.1847	2,883.1847	0.5653	0.0000	2,897.3178
2020	0.7199	12.8243	15.4013	0.0292	0.3710	0.6443	1.0153	0.1004	0.6438	0.7442	0.0000	2,840.7845	2,840.7845	0.5594	0.0000	2,854.7685
Maximum	0.7373	12.9672	15.5399	0.0293	0.3710	0.6478	1.0188	0.1004	0.6472	0.7476	0.0000	2,883.1847	2,883.1847	0.5653	0.0000	2,897.3178

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	9/30/2020	5	393	
2	Building Construction	Building Construction	4/1/2019	9/30/2020	5	393	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38

Well Drilling	Rubber Tired Dozers	0	7.00	247	0.40
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Well Drilling - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.4031	8.3855	10.2850	0.0175		0.4423	0.4423		0.4423	0.4423	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329
Total	0.4031	8.3855	10.2850	0.0175	0.0000	0.4423	0.4423	0.0000	0.4423	0.4423	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5000e-004	0.0189	3.7900e-003	5.0000e-005	1.9500e-003	7.0000e-005	2.0200e-003	5.1000e-004	7.0000e-005	5.8000e-004		5.4129	5.4129	3.9000e-004		5.4226
Vendor	0.0546	1.6071	0.3963	3.6000e-003	0.0896	0.0107	0.1002	0.0258	0.0102	0.0360		384.3170	384.3170	0.0259		384.9635
Worker	0.1214	0.0849	1.1198	2.9600e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		295.0904	295.0904	9.2500e-003		295.3216
Total	0.1765	1.7110	1.5199	6.6100e-003	0.3710	0.0129	0.3839	0.1004	0.0123	0.1127		684.8203	684.8203	0.0355		685.7076

3.2 Well Drilling - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.4031	8.3855	10.2850	0.0175		0.4423	0.4423		0.4423	0.4423	0.0000	1,680.8723	1,680.8723	0.3772		1,690.3025
Total	0.4031	8.3855	10.2850	0.0175	0.0000	0.4423	0.4423	0.0000	0.4423	0.4423	0.0000	1,680.8723	1,680.8723	0.3772		1,690.3025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.1000e-004	0.0177	3.6900e-003	5.0000e-005	1.9600e-003	6.0000e-005	2.0100e-003	5.1000e-004	5.0000e-005	5.7000e-004		5.3588	5.3588	3.8000e-004		5.3683
Vendor	0.0465	1.4745	0.3587	3.5700e-003	0.0896	7.3000e-003	0.0969	0.0258	6.9800e-003	0.0328		381.9078	381.9078	0.0244		382.5190
Worker	0.1121	0.0758	1.0190	2.8700e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		285.9591	285.9591	8.2400e-003		286.1651
Total	0.1591	1.5680	1.3813	6.4900e-003	0.3710	9.4900e-003	0.3805	0.1004	8.9900e-003	0.1094		673.2257	673.2257	0.0331		674.0523

3.3 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1577	2.8707	3.7349	5.1700e-003		0.1926	0.1926		0.1926	0.1926	0.0000	496.7495	496.7495	0.1491		500.4773
Total	0.1577	2.8707	3.7349	5.1700e-003		0.1926	0.1926		0.1926	0.1926	0.0000	496.7495	496.7495	0.1491		500.4773

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.6866	486.6866	0.1491		490.4137
Total	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.6866	486.6866	0.1491		490.4137

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

SARCCUP: IEUA Well Site - South Coast Air Basin, Winter

SARCCUP: IEUA Well Site - Mitigated
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1,000.00	User Defined Unit	1.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Extraction Well

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	393.00
tblConstructionPhase	NumDays	1.00	393.00
tblConstructionPhase	PhaseEndDate	8/19/2019	9/30/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	9/30/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	4/1/2019
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.7516	12.9778	15.4803	0.0290	0.3710	0.6480	1.0189	0.1004	0.6473	0.7477	0.0000	2,854.4726	2,854.4726	0.5666	0.0000	2,868.6368
2020	0.7333	12.8314	15.3454	0.0289	0.3710	0.6444	1.0154	0.1004	0.6439	0.7443	0.0000	2,812.5673	2,812.5673	0.5605	0.0000	2,826.5806
Maximum	0.7516	12.9778	15.4803	0.0290	0.3710	0.6480	1.0189	0.1004	0.6473	0.7477	0.0000	2,854.4726	2,854.4726	0.5666	0.0000	2,868.6368

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	9/30/2020	5	393	
2	Building Construction	Building Construction	4/1/2019	9/30/2020	5	393	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38

Well Drilling	Rubber Tired Dozers	0	7.00	247	0.40
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Well Drilling - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.4031	8.3855	10.2850	0.0175		0.4423	0.4423		0.4423	0.4423	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329
Total	0.4031	8.3855	10.2850	0.0175	0.0000	0.4423	0.4423	0.0000	0.4423	0.4423	0.0000	1,701.6149	1,701.6149	0.3807		1,711.1329

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	5.6000e-004	0.0192	4.0700e-003	5.0000e-005	1.9500e-003	7.0000e-005	2.0200e-003	5.1000e-004	7.0000e-005	5.8000e-004		5.3218	5.3218	4.0000e-004			5.3319
Vendor	0.0569	1.6091	0.4389	3.5000e-003	0.0896	0.0108	0.1004	0.0258	0.0104	0.0361		373.9945	373.9945	0.0277			374.6859
Worker	0.1333	0.0933	1.0174	2.7800e-003	0.2794	2.1900e-003	0.2816	0.0741	2.0200e-003	0.0761		276.7918	276.7918	8.6800e-003			277.0088
Total	0.1908	1.7216	1.4604	6.3300e-003	0.3710	0.0131	0.3841	0.1004	0.0124	0.1128		656.1082	656.1082	0.0367			657.0266

3.2 Well Drilling - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000				0.0000
Off-Road	0.4031	8.3855	10.2850	0.0175		0.4423	0.4423		0.4423	0.4423	0.0000	1,680.8723	1,680.8723	0.3772			1,690.3025
Total	0.4031	8.3855	10.2850	0.0175	0.0000	0.4423	0.4423	0.0000	0.4423	0.4423	0.0000	1,680.8723	1,680.8723	0.3772			1,690.3025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	5.2000e-004	0.0180	3.9400e-003	5.0000e-005	1.9600e-003	6.0000e-005	2.0100e-003	5.1000e-004	6.0000e-005	5.7000e-004		5.2673	5.2673	3.9000e-004			5.2771
Vendor	0.0486	1.4740	0.3974	3.4800e-003	0.0896	7.4100e-003	0.0970	0.0258	7.0900e-003	0.0329		371.5284	371.5284	0.0261			372.1815
Worker	0.1234	0.0833	0.9240	2.6900e-003	0.2794	2.1300e-003	0.2816	0.0741	1.9600e-003	0.0761		268.2128	268.2128	7.7200e-003			268.4058
Total	0.1725	1.5752	1.3253	6.2200e-003	0.3710	9.6000e-003	0.3806	0.1004	9.1100e-003	0.1095		645.0084	645.0084	0.0342			645.8644

3.3 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1577	2.8707	3.7349	5.1700e-003		0.1926	0.1926		0.1926	0.1926	0.0000	496.7495	496.7495	0.1491		500.4773
Total	0.1577	2.8707	3.7349	5.1700e-003		0.1926	0.1926		0.1926	0.1926	0.0000	496.7495	496.7495	0.1491		500.4773

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.6866	486.6866	0.1491		490.4137
Total	0.1577	2.8707	3.7350	5.1700e-003		0.1925	0.1925		0.1925	0.1925	0.0000	486.6866	486.6866	0.1491		490.4137

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Construction GHG Emissions

SARCCUP**GHG Construction Emissions - Unmitigated**

	On-Site (CO2e)	Off-Site (CO2e)	Total CO2e
Arlington Recharge			
Well Drilling (2019)	152.90	59.88	213
Well Drilling (2020)	48.30	18.83	67
Excavation and Shoring (2020)	239.13	56.53	296
Excavation and Shoring (2021)	313.66	72.78	386
Excavation and Shoring (2022)	312.51	71.02	384
Excavation and Shoring (2023)	156.30	34.31	191
Pipeline Installation (2020)	130.64	7.31	138
Pipeline Installation (2021)	171.30	9.52	181
Pipeline Installation (2022)	170.62	9.40	180
Pipeline Installation (2023)	85.30	4.55	90
Building Construction (2020)	44.27	0.00	44
Building Construction (2021)	58.07	0.00	58
Building Construction (2022)	57.89	0.00	58
Building Construction (2023)	28.97	0.00	29
Street Restoration (2020)	32.27	0.00	32
Street Restoration (2021)	42.32	0.00	42
Street Restoration (2022)	42.17	0.00	42
Street Restoration (2023)	21.08	0.00	21
Total			2,452
Amortized (30 years)			82

	On-Site (CO2e)	Off-Site (CO2e)	Total CO2e
Cannon Pump Station			
Decommissioning (2020)	95.05	51.14	146
Decommissioning (2021)	125.93	66.43	192
Decommissioning (2022)	125.49	64.75	190
Decommissioning (2023)	62.76	31.28	94
Excavation and Shoring (2020)	236.72	7.24	244
Excavation and Shoring (2021)	313.66	9.52	323
Excavation and Shoring (2022)	312.51	9.40	322
Excavation and Shoring (2023)	156.30	4.55	161
Building Construction (2020)	119.20	7.24	126
Building Construction (2021)	157.94	9.52	167
Building Construction (2022)	157.36	9.40	167
Building Construction (2023)	78.70	4.55	83
Pipeline Installation (2020)	129.32	7.24	137
Pipeline Installation (2021)	171.30	9.52	181
Pipeline Installation (2022)	170.62	9.40	180
Pipeline Installation (2023)	85.30	4.55	90

Street Restoration (2023)	7.30	0.00	7
Total			2,811
Amortized (30 years)			94

	On-Site (CO2e)	Off-Site (CO2e)	Total CO2e
ID-4 CRA Crossing Refurbishment			
Grading (2019)	116.15	60.17	176
Grading (2020)	36.40	15.74	52
Total			228
Amortized (30 years)			8

	On-Site (CO2e)	Off-Site (CO2e)	Total CO2e
Chino Basin Production Well Site			
Well Drilling (2019)	152.90	59.64	213
Well Drilling (2020)	150.27	58.33	209
Building Construction (2019)	44.72	0.00	45
Building Construction (2020)	43.60	0.00	44
Total			509
Amortized (30 years)			17

	On-Site (CO2e)	Off-Site (CO2e)	Total CO2e
Arundo Removal			
Mowing/Clearing/Grubbing (2019)	192.93	6.59	200
Mowing/Clearing/Grubbing (2020)	569.52	19.38	589
Mowing/Clearing/Grubbing (2021)	280.44	9.31	290
Maintenance/Monitoring (2019)	0.00	0.44	0
Maintenance/Monitoring (2020)	0.00	1.30	1
Maintenance/Monitoring (2021)	0.00	1.25	1
Maintenance/Monitoring (2022)	0.00	1.20	1
Maintenance/Monitoring (2023)	0.00	0.58	1
Total			1,083
Amortized (30 years)			36

	Total CO2e
Total Project	
2019	846
2020	2,125
2021	1,822
2022	1,524
2023	766

Project Total	7,084
Amortized (30 years)	236

Arlington Recharge

SARCCUP: Arlington Recharge - South Coast Air Basin, Annual

SARCCUP: Arlington Recharge
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	10,000.00	User Defined Unit	2.00	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10	Operational Year		2023	
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Two Pump stations: Assume approximately 5,000 SF and 1 acre each

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases except Well Drilling occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway/Water Trucks included as Vendor Trucks.

Grading - Assume 0.5 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	5,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	15,000.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	200.00	850.00
tblConstructionPhase	NumDays	4.00	850.00
tblConstructionPhase	NumDays	10.00	850.00
tblConstructionPhase	NumDays	2.00	260.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	10,000.00
tblLandUse	LotAcreage	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	13.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	25.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	4.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1044	1.0503	0.8325	2.3600e-003	0.1186	0.0447	0.1634	0.0187	0.0430	0.0617	0.0000	211.8561	211.8561	0.0372	0.0000	212.7872
2020	0.3976	3.9332	3.4398	6.5400e-003	0.2147	0.1947	0.4093	0.0312	0.1825	0.2137	0.0000	573.9337	573.9337	0.1338	0.0000	577.2796
2021	0.4355	4.2698	4.1018	7.5700e-003	0.1320	0.2064	0.3384	0.0223	0.1932	0.2155	0.0000	663.6730	663.6730	0.1591	0.0000	667.6512
2022	0.3904	3.7412	4.0299	7.5300e-003	0.1318	0.1745	0.3063	0.0223	0.1634	0.1857	0.0000	659.6595	659.6595	0.1579	0.0000	663.6057
2023	0.1812	1.6894	1.9978	3.7500e-003	0.1074	0.0768	0.1842	0.0156	0.0719	0.0875	0.0000	328.5578	328.5578	0.0784	0.0000	330.5183
Maximum	0.4355	4.2698	4.1018	7.5700e-003	0.2147	0.2064	0.4093	0.0312	0.1932	0.2155	0.0000	663.6730	663.6730	0.1591	0.0000	667.6512

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	3/27/2020	5	260	
2	Architectural Coating	Architectural Coating	2/25/2020	2/24/2020	5	0	
3	Excavation and Shoring	Grading	3/30/2020	6/30/2023	5	850	
4	Pipeline Installation	Trenching	3/30/2020	6/30/2023	5	850	
5	Building Construction	Building Construction	3/30/2020	6/30/2023	5	850	
6	Street Restoration	Paving	3/30/2020	6/30/2023	5	850	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Concrete/Industrial Saws	0	8.00	81	0.73
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38
Well Drilling	Rubber Tired Dozers	0	8.00	247	0.40
Well Drilling	Scrapers	0	8.00	367	0.48
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38
Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Scrapers	0	8.00	367	0.48
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Graders	0	8.00	187	0.41
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Rubber Tired Dozers	0	8.00	247	0.40
Pipeline Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	8.00	231	0.29

Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	25.00	13.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Well Drilling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0827	0.0000	0.0827	8.9300e-003	0.0000	8.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0870	0.8765	0.6880	1.7200e-003		0.0435	0.0435		0.0418	0.0418	0.0000	152.0522	152.0522	0.0340	0.0000	152.9027
Total	0.0870	0.8765	0.6880	1.7200e-003	0.0827	0.0435	0.1262	8.9300e-003	0.0418	0.0507	0.0000	152.0522	152.0522	0.0340	0.0000	152.9027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.9100e-003	5.8000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7259	0.7259	5.0000e-005	0.0000	0.7273
Vendor	5.4700e-003	0.1615	0.0412	3.5000e-004	8.6900e-003	1.0600e-003	9.7500e-003	2.5100e-003	1.0100e-003	3.5200e-003	0.0000	33.9543	33.9543	2.3800e-003	0.0000	34.0139
Worker	0.0119	9.4600e-003	0.1028	2.8000e-004	0.0270	2.2000e-004	0.0272	7.1800e-003	2.0000e-004	7.3700e-003	0.0000	25.1236	25.1236	7.9000e-004	0.0000	25.1433
Total	0.0174	0.1738	0.1446	6.4000e-004	0.0359	1.2900e-003	0.0372	9.7400e-003	1.2200e-003	0.0110	0.0000	59.8039	59.8039	3.2200e-003	0.0000	59.8845

3.2 Well Drilling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0827	0.0000	0.0827	8.9300e-003	0.0000	8.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0259	0.2614	0.2195	5.5000e-004		0.0124	0.0124		0.0119	0.0119	0.0000	48.0331	48.0331	0.0108	0.0000	48.3026
Total	0.0259	0.2614	0.2195	5.5000e-004	0.0827	0.0124	0.0951	8.9300e-003	0.0119	0.0209	0.0000	48.0331	48.0331	0.0108	0.0000	48.3026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.7000e-004	1.8000e-004	0.0000	1.7000e-004	0.0000	1.8000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.2298	0.2298	2.0000e-005	0.0000	0.2302
Vendor	1.4900e-003	0.0473	0.0119	1.1000e-004	2.7800e-003	2.3000e-004	3.0100e-003	8.0000e-004	2.2000e-004	1.0200e-003	0.0000	10.7890	10.7890	7.2000e-004	0.0000	10.8070
Worker	3.5100e-003	2.7000e-003	0.0299	9.0000e-005	8.6400e-003	7.0000e-005	8.7100e-003	2.2900e-003	6.0000e-005	2.3600e-003	0.0000	7.7855	7.7855	2.2000e-004	0.0000	7.7911
Total	5.0200e-003	0.0509	0.0420	2.0000e-004	0.0116	3.0000e-004	0.0119	3.1300e-003	2.8000e-004	3.4300e-003	0.0000	18.8042	18.8042	9.6000e-004	0.0000	18.8282

3.3 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Excavation and Shoring - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0829	0.0000	0.0829	8.9500e-003	0.0000	8.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1698	1.7004	1.6053	2.7200e-003		0.0874	0.0874		0.0816	0.0816	0.0000	237.4795	237.4795	0.0659	0.0000	239.1260
Total	0.1698	1.7004	1.6053	2.7200e-003	0.0829	0.0874	0.1702	8.9500e-003	0.0816	0.0906	0.0000	237.4795	237.4795	0.0659	0.0000	239.1260

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	1.8000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.2220	0.2220	2.0000e-005	0.0000	0.2224
Vendor	4.3800e-003	0.1387	0.0350	3.3000e-004	8.1500e-003	6.8000e-004	8.8300e-003	2.3500e-003	6.5000e-004	3.0000e-003	0.0000	31.6451	31.6451	2.1100e-003	0.0000	31.6979
Worker	0.0111	8.5200e-003	0.0944	2.7000e-004	0.0273	2.1000e-004	0.0275	7.2500e-003	2.0000e-004	7.4400e-003	0.0000	24.5922	24.5922	7.1000e-004	0.0000	24.6099
Total	0.0155	0.1481	0.1295	6.0000e-004	0.0356	8.9000e-004	0.0365	9.6400e-003	8.5000e-004	0.0105	0.0000	56.4593	56.4593	2.8400e-003	0.0000	56.5302

3.4 Excavation and Shoring - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0829	0.0000	0.0829	8.9500e-003	0.0000	8.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2042	2.0116	2.0828	3.5700e-003		0.1000	0.1000		0.0935	0.0935	0.0000	311.5107	311.5107	0.0861	0.0000	313.6635
Total	0.2042	2.0116	2.0828	3.5700e-003	0.0829	0.1000	0.1829	8.9500e-003	0.0935	0.1024	0.0000	311.5107	311.5107	0.0861	0.0000	313.6635

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.0300e-003	2.3000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.2881	0.2881	2.0000e-005	0.0000	0.2886
Vendor	4.8800e-003	0.1650	0.0417	4.2000e-004	0.0107	3.4000e-004	0.0110	3.0800e-003	3.2000e-004	3.4100e-003	0.0000	41.1921	41.1921	2.6600e-003	0.0000	41.2585
Worker	0.0136	0.0101	0.1139	3.5000e-004	0.0358	2.7000e-004	0.0361	9.5100e-003	2.5000e-004	9.7500e-003	0.0000	31.2108	31.2108	8.4000e-004	0.0000	31.2318
Total	0.0185	0.1761	0.1558	7.7000e-004	0.0467	6.1000e-004	0.0473	0.0126	5.7000e-004	0.0132	0.0000	72.6910	72.6910	3.5200e-003	0.0000	72.7789

3.4 Excavation and Shoring - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0829	0.0000	0.0829	8.9500e-003	0.0000	8.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1827	1.7393	2.0520	3.5600e-003		0.0840	0.0840		0.0785	0.0785	0.0000	310.3662	310.3662	0.0856	0.0000	312.5066
Total	0.1827	1.7393	2.0520	3.5600e-003	0.0829	0.0840	0.1668	8.9500e-003	0.0785	0.0874	0.0000	310.3662	310.3662	0.0856	0.0000	312.5066

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	9.5000e-004	2.2000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.2835	0.2835	2.0000e-005	0.0000	0.2840
Vendor	4.5600e-003	0.1560	0.0393	4.2000e-004	0.0107	2.9000e-004	0.0109	3.0700e-003	2.8000e-004	3.3500e-003	0.0000	40.6718	40.6718	2.5500e-003	0.0000	40.7357
Worker	0.0127	9.0600e-003	0.1047	3.3000e-004	0.0357	2.6000e-004	0.0359	9.4700e-003	2.4000e-004	9.7100e-003	0.0000	29.9776	29.9776	7.6000e-004	0.0000	29.9965
Total	0.0173	0.1660	0.1443	7.5000e-004	0.0465	5.5000e-004	0.0470	0.0126	5.2000e-004	0.0131	0.0000	70.9329	70.9329	3.3300e-003	0.0000	71.0161

3.4 Excavation and Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0829	0.0000	0.0829	8.9500e-003	0.0000	8.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0853	0.7872	1.0214	1.7800e-003		0.0368	0.0368		0.0344	0.0344	0.0000	155.2330	155.2330	0.0427	0.0000	156.3001
Total	0.0853	0.7872	1.0214	1.7800e-003	0.0829	0.0368	0.1197	8.9500e-003	0.0344	0.0433	0.0000	155.2330	155.2330	0.0427	0.0000	156.3001

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	3.0000e-004	1.0000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1360	0.1360	1.0000e-005	0.0000	0.1362
Vendor	1.6900e-003	0.0585	0.0176	2.0000e-004	5.3300e-003	7.0000e-005	5.3900e-003	1.5400e-003	6.0000e-005	1.6000e-003	0.0000	19.7081	19.7081	1.1300e-003	0.0000	19.7362
Worker	5.9700e-003	4.1000e-003	0.0483	1.6000e-004	0.0178	1.3000e-004	0.0180	4.7300e-003	1.2000e-004	4.8500e-003	0.0000	14.4303	14.4303	3.4000e-004	0.0000	14.4388
Total	7.6700e-003	0.0629	0.0660	3.6000e-004	0.0233	2.0000e-004	0.0235	6.3100e-003	1.8000e-004	6.4900e-003	0.0000	34.2743	34.2743	1.4800e-003	0.0000	34.3112

3.5 Pipeline Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1175	1.1311	0.8299	1.5100e-003		0.0562	0.0562		0.0532	0.0532	0.0000	129.9100	129.9100	0.0291	0.0000	130.6376
Total	0.1175	1.1311	0.8299	1.5100e-003		0.0562	0.0562		0.0532	0.0532	0.0000	129.9100	129.9100	0.0291	0.0000	130.6376

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0100e-003	0.0320	8.0700e-003	8.0000e-005	1.8800e-003	1.6000e-004	2.0400e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.3027	7.3027	4.9000e-004	0.0000	7.3149
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0100e-003	0.0320	8.0700e-003	8.0000e-005	1.8800e-003	1.6000e-004	2.0400e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.3027	7.3027	4.9000e-004	0.0000	7.3149

3.5 Pipeline Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1362	1.3118	1.0638	1.9800e-003		0.0630	0.0630		0.0596	0.0596	0.0000	170.3551	170.3551	0.0377	0.0000	171.2965
Total	0.1362	1.3118	1.0638	1.9800e-003		0.0630	0.0630		0.0596	0.0596	0.0000	170.3551	170.3551	0.0377	0.0000	171.2965

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212

3.5 Pipeline Installation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1232	1.1605	1.0451	1.9700e-003		0.0548	0.0548		0.0519	0.0519	0.0000	169.6934	169.6934	0.0372	0.0000	170.6230
Total	0.1232	1.1605	1.0451	1.9700e-003		0.0548	0.0548		0.0519	0.0519	0.0000	169.6934	169.6934	0.0372	0.0000	170.6230

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005

3.5 Pipeline Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0573	0.5322	0.5180	9.9000e-004		0.0245	0.0245		0.0232	0.0232	0.0000	84.8431	84.8431	0.0184	0.0000	85.3039
Total	0.0573	0.5322	0.5180	9.9000e-004		0.0245	0.0245		0.0232	0.0232	0.0000	84.8431	84.8431	0.0184	0.0000	85.3039

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0396	0.3660	0.3673	5.1000e-004		0.0239	0.0239		0.0221	0.0221	0.0000	43.9307	43.9307	0.0135	0.0000	44.2671
Total	0.0396	0.3660	0.3673	5.1000e-004		0.0239	0.0239		0.0221	0.0221	0.0000	43.9307	43.9307	0.0135	0.0000	44.2671

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0471	0.4373	0.4776	6.7000e-004		0.0269	0.0269		0.0249	0.0249	0.0000	57.6332	57.6332	0.0177	0.0000	58.0745
Total	0.0471	0.4373	0.4776	6.7000e-004		0.0269	0.0269		0.0249	0.0249	0.0000	57.6332	57.6332	0.0177	0.0000	58.0745

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0194	0.1802	0.2345	3.4000e-004		9.4800e-003	9.4800e-003		8.7800e-003	8.7800e-003	0.0000	28.7461	28.7461	8.8100e-003	0.0000	28.9662
Total	0.0194	0.1802	0.2345	3.4000e-004		9.4800e-003	9.4800e-003		8.7800e-003	8.7800e-003	0.0000	28.7461	28.7461	8.8100e-003	0.0000	28.9662

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Street Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0234	0.2434	0.2384	3.6000e-004		0.0134	0.0134		0.0123	0.0123	0.0000	32.0141	32.0141	0.0104	0.0000	32.2730
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0234	0.2434	0.2384	3.6000e-004		0.0134	0.0134		0.0123	0.0123	0.0000	32.0141	32.0141	0.0104	0.0000	32.2730

3.7 Street Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0243	0.2486	0.3084	4.8000e-004		0.0130	0.0130		0.0119	0.0119	0.0000	41.8289	41.8289	0.0135	0.0000	42.1671
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0243	0.2486	0.3084	4.8000e-004		0.0130	0.0130		0.0119	0.0119	0.0000	41.8289	41.8289	0.0135	0.0000	42.1671

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Street Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0112	0.1135	0.1539	2.4000e-004		5.7600e-003	5.7600e-003		5.3000e-003	5.3000e-003	0.0000	20.9134	20.9134	6.7600e-003	0.0000	21.0825
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0112	0.1135	0.1539	2.4000e-004		5.7600e-003	5.7600e-003		5.3000e-003	5.3000e-003	0.0000	20.9134	20.9134	6.7600e-003	0.0000	21.0825

SARCCUP: Arlington Recharge - South Coast Air Basin, Annual

SARCCUP: Arlington Recharge - Mitigated
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	10,000.00	User Defined Unit	2.00	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10	Operational Year		2023	
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Two Pump stations: Assume approximately 5,000 SF and 1 acre each

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases except Well Drilling occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway/Water Trucks included as Vendor Trucks.

Grading - Assume 0.5 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	5,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	15,000.00	0.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	200.00	850.00

tblConstructionPhase	NumDays	4.00	850.00
tblConstructionPhase	NumDays	10.00	850.00
tblConstructionPhase	NumDays	2.00	260.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	AcresOfGrading	0.00	400.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	10,000.00
tblLandUse	LotAcreage	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	25.00

tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	13.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	25.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	4.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0571	0.9998	1.1577	2.3600e-003	0.1186	0.0449	0.1635	0.0187	0.0448	0.0635	0.0000	211.8561	211.8561	0.0372	0.0000	212.7872
2020	0.1745	3.0312	3.9779	6.5400e-003	0.2147	0.1572	0.3718	0.0312	0.1571	0.1883	0.0000	573.9337	573.9337	0.1338	0.0000	577.2796
2021	0.2010	3.5364	4.7190	7.5700e-003	0.1320	0.1860	0.3179	0.0223	0.1859	0.2082	0.0000	663.6730	663.6730	0.1591	0.0000	667.6512
2022	0.1974	3.5084	4.6880	7.5300e-003	0.1318	0.1845	0.3163	0.0223	0.1845	0.2067	0.0000	659.6595	659.6595	0.1579	0.0000	663.6057
2023	0.0969	1.7283	2.3368	3.7500e-003	0.1074	0.0919	0.1993	0.0156	0.0919	0.1075	0.0000	328.5578	328.5578	0.0784	0.0000	330.5183
Maximum	0.2010	3.5364	4.7190	7.5700e-003	0.2147	0.1860	0.3718	0.0312	0.1859	0.2082	0.0000	663.6730	663.6730	0.1591	0.0000	667.6512

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	3/27/2020	5	260	
2	Architectural Coating	Architectural Coating	2/25/2020	2/24/2020	5	0	
3	Excavation and Shoring	Grading	3/30/2020	6/30/2023	5	850	
4	Pipeline Installation	Trenching	3/30/2020	6/30/2023	5	850	
5	Building Construction	Building Construction	3/30/2020	6/30/2023	5	850	
6	Street Restoration	Paving	3/30/2020	6/30/2023	5	850	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Concrete/Industrial Saws	0	8.00	81	0.73
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38
Well Drilling	Rubber Tired Dozers	0	8.00	247	0.40
Well Drilling	Scrapers	0	8.00	367	0.48
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	0	6.00	78	0.48
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38

Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Scrapers	0	8.00	367	0.48
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Graders	0	8.00	187	0.41
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Rubber Tired Dozers	0	8.00	247	0.40
Pipeline Installation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	8.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	25.00	13.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Well Drilling - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0827	0.0000	0.0827	8.9300e-003	0.0000	8.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0397	0.8260	1.0131	1.7200e-003		0.0436	0.0436		0.0436	0.0436	0.0000	152.0522	152.0522	0.0340	0.0000	152.9027
Total	0.0397	0.8260	1.0131	1.7200e-003	0.0827	0.0436	0.1263	8.9300e-003	0.0436	0.0525	0.0000	152.0522	152.0522	0.0340	0.0000	152.9027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.9100e-003	5.8000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7259	0.7259	5.0000e-005	0.0000	0.7273
Vendor	5.4700e-003	0.1615	0.0412	3.5000e-004	8.6900e-003	1.0600e-003	9.7500e-003	2.5100e-003	1.0100e-003	3.5200e-003	0.0000	33.9543	33.9543	2.3800e-003	0.0000	34.0139
Worker	0.0119	9.4600e-003	0.1028	2.8000e-004	0.0270	2.2000e-004	0.0272	7.1800e-003	2.0000e-004	7.3700e-003	0.0000	25.1236	25.1236	7.9000e-004	0.0000	25.1433
Total	0.0174	0.1738	0.1446	6.4000e-004	0.0359	1.2900e-003	0.0372	9.7400e-003	1.2200e-003	0.0110	0.0000	59.8039	59.8039	3.2200e-003	0.0000	59.8845

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Excavation and Shoring - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0829	0.0000	0.0829	8.9500e-003	0.0000	8.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	1.3388	1.8551	2.7200e-003		0.0738	0.0738		0.0738	0.0738	0.0000	237.4795	237.4795	0.0659	0.0000	239.1260
Total	0.0668	1.3388	1.8551	2.7200e-003	0.0829	0.0738	0.1567	8.9500e-003	0.0738	0.0828	0.0000	237.4795	237.4795	0.0659	0.0000	239.1260

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	1.8000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.2220	0.2220	2.0000e-005	0.0000	0.2224
Vendor	4.3800e-003	0.1387	0.0350	3.3000e-004	8.1500e-003	6.8000e-004	8.8300e-003	2.3500e-003	6.5000e-004	3.0000e-003	0.0000	31.6451	31.6451	2.1100e-003	0.0000	31.6979
Worker	0.0111	8.5200e-003	0.0944	2.7000e-004	0.0273	2.1000e-004	0.0275	7.2500e-003	2.0000e-004	7.4400e-003	0.0000	24.5922	24.5922	7.1000e-004	0.0000	24.6099
Total	0.0155	0.1481	0.1295	6.0000e-004	0.0356	8.9000e-004	0.0365	9.6400e-003	8.5000e-004	0.0105	0.0000	56.4593	56.4593	2.8400e-003	0.0000	56.5302

3.4 Excavation and Shoring - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0829	0.0000	0.0829	8.9500e-003	0.0000	8.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0877	1.7559	2.4330	3.5700e-003		0.0968	0.0968		0.0968	0.0968	0.0000	311.5107	311.5107	0.0861	0.0000	313.6635
Total	0.0877	1.7559	2.4330	3.5700e-003	0.0829	0.0968	0.1797	8.9500e-003	0.0968	0.1058	0.0000	311.5107	311.5107	0.0861	0.0000	313.6635

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.0300e-003	2.3000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.2881	0.2881	2.0000e-005	0.0000	0.2886
Vendor	4.8800e-003	0.1650	0.0417	4.2000e-004	0.0107	3.4000e-004	0.0110	3.0800e-003	3.2000e-004	3.4100e-003	0.0000	41.1921	41.1921	2.6600e-003	0.0000	41.2585
Worker	0.0136	0.0101	0.1139	3.5000e-004	0.0358	2.7000e-004	0.0361	9.5100e-003	2.5000e-004	9.7500e-003	0.0000	31.2108	31.2108	8.4000e-004	0.0000	31.2318
Total	0.0185	0.1761	0.1558	7.7000e-004	0.0467	6.1000e-004	0.0473	0.0126	5.7000e-004	0.0132	0.0000	72.6910	72.6910	3.5200e-003	0.0000	72.7789

3.4 Excavation and Shoring - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0829	0.0000	0.0829	8.9500e-003	0.0000	8.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0873	1.7491	2.4237	3.5600e-003		0.0964	0.0964		0.0964	0.0964	0.0000	310.3662	310.3662	0.0856	0.0000	312.5066
Total	0.0873	1.7491	2.4237	3.5600e-003	0.0829	0.0964	0.1793	8.9500e-003	0.0964	0.1054	0.0000	310.3662	310.3662	0.0856	0.0000	312.5066

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	9.5000e-004	2.2000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.2835	0.2835	2.0000e-005	0.0000	0.2840
Vendor	4.5600e-003	0.1560	0.0393	4.2000e-004	0.0107	2.9000e-004	0.0109	3.0700e-003	2.8000e-004	3.3500e-003	0.0000	40.6718	40.6718	2.5500e-003	0.0000	40.7357
Worker	0.0127	9.0600e-003	0.1047	3.3000e-004	0.0357	2.6000e-004	0.0359	9.4700e-003	2.4000e-004	9.7100e-003	0.0000	29.9776	29.9776	7.6000e-004	0.0000	29.9965
Total	0.0173	0.1660	0.1443	7.5000e-004	0.0465	5.5000e-004	0.0470	0.0126	5.2000e-004	0.0131	0.0000	70.9329	70.9329	3.3300e-003	0.0000	71.0161

3.4 Excavation and Shoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0829	0.0000	0.0829	8.9500e-003	0.0000	8.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0437	0.8746	1.2119	1.7800e-003		0.0482	0.0482		0.0482	0.0482	0.0000	155.2330	155.2330	0.0427	0.0000	156.3001
Total	0.0437	0.8746	1.2119	1.7800e-003	0.0829	0.0482	0.1311	8.9500e-003	0.0482	0.0572	0.0000	155.2330	155.2330	0.0427	0.0000	156.3001

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	3.0000e-004	1.0000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1360	0.1360	1.0000e-005	0.0000	0.1362
Vendor	1.6900e-003	0.0585	0.0176	2.0000e-004	5.3300e-003	7.0000e-005	5.3900e-003	1.5400e-003	6.0000e-005	1.6000e-003	0.0000	19.7081	19.7081	1.1300e-003	0.0000	19.7362
Worker	5.9700e-003	4.1000e-003	0.0483	1.6000e-004	0.0178	1.3000e-004	0.0180	4.7300e-003	1.2000e-004	4.8500e-003	0.0000	14.4303	14.4303	3.4000e-004	0.0000	14.4388
Total	7.6700e-003	0.0629	0.0660	3.6000e-004	0.0233	2.0000e-004	0.0235	6.3100e-003	1.8000e-004	6.4900e-003	0.0000	34.2743	34.2743	1.4800e-003	0.0000	34.3112

3.5 Pipeline Installation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0488	0.7275	0.9717	1.5100e-003		0.0384	0.0384		0.0384	0.0384	0.0000	129.9100	129.9100	0.0291	0.0000	130.6376
Total	0.0488	0.7275	0.9717	1.5100e-003		0.0384	0.0384		0.0384	0.0384	0.0000	129.9100	129.9100	0.0291	0.0000	130.6376

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0100e-003	0.0320	8.0700e-003	8.0000e-005	1.8800e-003	1.6000e-004	2.0400e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.3027	7.3027	4.9000e-004	0.0000	7.3149
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0100e-003	0.0320	8.0700e-003	8.0000e-005	1.8800e-003	1.6000e-004	2.0400e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.3027	7.3027	4.9000e-004	0.0000	7.3149

3.5 Pipeline Installation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0615	0.9501	1.2712	1.9800e-003		0.0496	0.0496		0.0496	0.0496	0.0000	170.3551	170.3551	0.0377	0.0000	171.2965
Total	0.0615	0.9501	1.2712	1.9800e-003		0.0496	0.0496		0.0496	0.0496	0.0000	170.3551	170.3551	0.0377	0.0000	171.2965

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212

3.5 Pipeline Installation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0596	0.9434	1.2649	1.9700e-003		0.0487	0.0487		0.0487	0.0487	0.0000	169.6934	169.6934	0.0372	0.0000	170.6230
Total	0.0596	0.9434	1.2649	1.9700e-003		0.0487	0.0487		0.0487	0.0487	0.0000	169.6934	169.6934	0.0372	0.0000	170.6230

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005

3.5 Pipeline Installation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0291	0.4703	0.6319	9.9000e-004		0.0241	0.0241		0.0241	0.0241	0.0000	84.8431	84.8431	0.0184	0.0000	85.3039
Total	0.0291	0.4703	0.6319	9.9000e-004		0.0241	0.0241		0.0241	0.0241	0.0000	84.8431	84.8431	0.0184	0.0000	85.3039

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545

3.6 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0157	0.2856	0.3716	5.1000e-004		0.0192	0.0192		0.0192	0.0192	0.0000	43.9307	43.9307	0.0135	0.0000	44.2671
Total	0.0157	0.2856	0.3716	5.1000e-004		0.0192	0.0192		0.0192	0.0192	0.0000	43.9307	43.9307	0.0135	0.0000	44.2671

3.6 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0205	0.3732	0.4856	6.7000e-004		0.0250	0.0250		0.0250	0.0250	0.0000	57.4523	57.4523	0.0176	0.0000	57.8923
Total	0.0205	0.3732	0.4856	6.7000e-004		0.0250	0.0250		0.0250	0.0250	0.0000	57.4523	57.4523	0.0176	0.0000	57.8923

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1866	0.2428	3.4000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	28.7461	28.7461	8.8100e-003	0.0000	28.9662
Total	0.0103	0.1866	0.2428	3.4000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	28.7461	28.7461	8.8100e-003	0.0000	28.9662

3.7 Street Restoration - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0117	0.2416	0.3619	4.8000e-004		0.0138	0.0138		0.0138	0.0138	0.0000	41.9772	41.9772	0.0136	0.0000	42.3166
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0117	0.2416	0.3619	4.8000e-004		0.0138	0.0138		0.0138	0.0138	0.0000	41.9772	41.9772	0.0136	0.0000	42.3166

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Street Restoration - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0117	0.2407	0.3605	4.8000e-004		0.0137	0.0137		0.0137	0.0137	0.0000	41.8289	41.8289	0.0135	0.0000	42.1671
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0117	0.2407	0.3605	4.8000e-004		0.0137	0.0137		0.0137	0.0137	0.0000	41.8289	41.8289	0.0135	0.0000	42.1671

Arundo Removal

Arundo Removal - South Coast Air Basin, Annual

Arundo Removal
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	640.00	User Defined Unit	640.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Arundo Removal along Santa Ana River

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. Off-Highway Trucks included as Vendor Trucks

Demolition -

Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	420.00	478.00
tblConstructionPhase	NumDays	420.00	1,000.00
tblConstructionPhase	PhaseEndDate	4/9/2021	6/30/2021
tblConstructionPhase	PhaseEndDate	11/18/2022	6/30/2023
tblConstructionPhase	PhaseStartDate	4/10/2021	9/2/2019
tblLandUse	LotAcreage	0.00	640.00
tblOffRoadEquipment	HorsePower	172.00	88.00
tblOffRoadEquipment	LoadFactor	0.42	0.34
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	40.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	1.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2260	2.1940	1.3509	2.2400e-003	0.5297	0.1255	0.6552	0.2895	0.1157	0.4053	0.0000	198.5018	198.5018	0.0584	0.0000	199.9610
2020	0.6452	6.1935	4.0112	6.7300e-003	1.5953	0.3520	1.9473	0.8720	0.3248	1.1968	0.0000	585.8068	585.8068	0.1758	0.0000	590.2017
2021	0.3023	2.8901	1.9561	3.3200e-003	0.7862	0.1611	0.9473	0.4295	0.1487	0.5782	0.0000	288.8407	288.8407	0.0866	0.0000	291.0045
2022	5.1000e-004	3.6000e-004	4.1900e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1991	1.1991	3.0000e-005	0.0000	1.1999
2023	2.4000e-004	1.6000e-004	1.9300e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5772	0.5772	1.0000e-005	0.0000	0.5776
Maximum	0.6452	6.1935	4.0112	6.7300e-003	1.5953	0.3520	1.9473	0.8720	0.3248	1.1968	0.0000	585.8068	585.8068	0.1758	0.0000	590.2017

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mowing/Clearing/Grubbing	Site Preparation	9/2/2019	6/30/2021	5	478	
2	Maintenance/Monitoring	Site Preparation	9/2/2019	6/30/2023	5	1000	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mowing/Clearing/Grubbing	Dumpers/Tenders	5	8.00	16	0.38
Mowing/Clearing/Grubbing	Excavators	2	8.00	158	0.38
Mowing/Clearing/Grubbing	Off-Highway Trucks	0	8.00	402	0.38
Mowing/Clearing/Grubbing	Other Construction Equipment	6	8.00	88	0.34
Mowing/Clearing/Grubbing	Rubber Tired Dozers	0	8.00	247	0.40
Mowing/Clearing/Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Mowing/Clearing/Grubbing	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Maintenance/Monitoring	Cranes	0	7.00	231	0.29
Maintenance/Monitoring	Forklifts	0	8.00	89	0.20
Maintenance/Monitoring	Generator Sets	0	8.00	84	0.74
Maintenance/Monitoring	Off-Highway Trucks	0	4.00	402	0.38
Maintenance/Monitoring	Rubber Tired Dozers	0	8.00	247	0.40
Maintenance/Monitoring	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Maintenance/Monitoring	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mowing/Clearing/Grubbing	16	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Maintenance/Monitoring	0	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Mowing/Clearing/Grubbing - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5239	0.0000	0.5239	0.2880	0.0000	0.2880	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2233	2.1820	1.3283	2.1600e-003		0.1253	0.1253		0.1156	0.1156	0.0000	191.4777	191.4777	0.0581	0.0000	192.9294
Total	0.2233	2.1820	1.3283	2.1600e-003	0.5239	0.1253	0.6493	0.2880	0.1156	0.4036	0.0000	191.4777	191.4777	0.0581	0.0000	192.9294

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	0.0102	2.6000e-003	2.0000e-005	5.5000e-004	7.0000e-005	6.1000e-004	1.6000e-004	6.0000e-005	2.2000e-004	0.0000	2.1422	2.1422	1.5000e-004	0.0000	2.1459
Worker	2.0900e-003	1.6700e-003	0.0182	5.0000e-005	4.7700e-003	4.0000e-005	4.8100e-003	1.2700e-003	4.0000e-005	1.3000e-003	0.0000	4.4381	4.4381	1.4000e-004	0.0000	4.4416
Total	2.4400e-003	0.0119	0.0208	7.0000e-005	5.3200e-003	1.1000e-004	5.4200e-003	1.4300e-003	1.0000e-004	1.5200e-003	0.0000	6.5802	6.5802	2.9000e-004	0.0000	6.5875

3.2 Mowing/Clearing/Grubbing - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5778	0.0000	1.5778	0.8673	0.0000	0.8673	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6379	6.1604	3.9495	6.5100e-003		0.3518	0.3518		0.3246	0.3246	0.0000	565.1509	565.1509	0.1750	0.0000	569.5248
Total	0.6379	6.1604	3.9495	6.5100e-003	1.5778	0.3518	1.9296	0.8673	0.3246	1.1918	0.0000	565.1509	565.1509	0.1750	0.0000	569.5248

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e-004	0.0281	7.0800e-003	7.0000e-005	1.6500e-003	1.4000e-004	1.7900e-003	4.8000e-004	1.3000e-004	6.1000e-004	0.0000	6.4098	6.4098	4.3000e-004	0.0000	6.4205
Worker	5.8300e-003	4.4900e-003	0.0497	1.4000e-004	0.0144	1.1000e-004	0.0145	3.8200e-003	1.0000e-004	3.9200e-003	0.0000	12.9511	12.9511	3.7000e-004	0.0000	12.9604
Total	6.7200e-003	0.0326	0.0568	2.1000e-004	0.0160	2.5000e-004	0.0163	4.3000e-003	2.3000e-004	4.5300e-003	0.0000	19.3608	19.3608	8.0000e-004	0.0000	19.3808

3.2 Mowing/Clearing/Grubbing - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.7769	0.0000	0.7769	0.4270	0.0000	0.4270	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2987	2.8752	1.9258	3.2000e-003		0.1611	0.1611		0.1486	0.1486	0.0000	278.2896	278.2896	0.0862	0.0000	280.4434
Total	0.2987	2.8752	1.9258	3.2000e-003	0.7769	0.1611	0.9379	0.4270	0.1486	0.5756	0.0000	278.2896	278.2896	0.0862	0.0000	280.4434

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7000e-004	0.0126	3.1700e-003	3.0000e-005	8.1000e-004	3.0000e-005	8.4000e-004	2.3000e-004	2.0000e-005	2.6000e-004	0.0000	3.1322	3.1322	2.0000e-004	0.0000	3.1373
Worker	2.6800e-003	1.9900e-003	0.0225	7.0000e-005	7.0800e-003	5.0000e-005	7.1300e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	6.1704	6.1704	1.7000e-004	0.0000	6.1746
Total	3.0500e-003	0.0145	0.0257	1.0000e-004	7.8900e-003	8.0000e-005	7.9700e-003	2.1100e-003	7.0000e-005	2.1900e-003	0.0000	9.3026	9.3026	3.7000e-004	0.0000	9.3118

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.5000e-004	4.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2951	1.2951	4.0000e-005	0.0000	1.2960
Total	5.8000e-004	4.5000e-004	4.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2951	1.2951	4.0000e-005	0.0000	1.2960

3.3 Maintenance/Monitoring - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.0000e-004	4.5500e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2484	1.2484	3.0000e-005	0.0000	1.2493
Total	5.4000e-004	4.0000e-004	4.5500e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2484	1.2484	3.0000e-005	0.0000	1.2493

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.6000e-004	1.9300e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5772	0.5772	1.0000e-005	0.0000	0.5776
Total	2.4000e-004	1.6000e-004	1.9300e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5772	0.5772	1.0000e-005	0.0000	0.5776

Arundo Removal - South Coast Air Basin, Annual

Arundo Removal - Mitigated
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	640.00	User Defined Unit	640.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Arundo Removal along Santa Ana River
- Construction Phase - Project-Specific Schedule
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment - Project-Specific Equipment
- Trips and VMT - Project-Specific Daily Maximum. Off-Highway Trucks included as Vendor Trucks
- Demolition -
- Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	420.00	478.00
tblConstructionPhase	NumDays	420.00	1,000.00
tblLandUse	LotAcreage	0.00	640.00
tblOffRoadEquipment	HorsePower	172.00	88.00
tblOffRoadEquipment	LoadFactor	0.42	0.34
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	40.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	1.00

2.0 Emissions Summary

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0517	1.0303	1.3691	2.2400e-003	0.5297	0.0555	0.5852	0.2895	0.0555	0.3450	0.0000	198.5018	198.5018	0.0584	0.0000	199.9610
2020	0.1551	3.0995	4.1168	6.7300e-003	1.5953	0.1671	1.7623	0.8720	0.1671	1.0390	0.0000	585.8068	585.8068	0.1758	0.0000	590.2017
2021	0.0764	1.5248	2.0268	3.3200e-003	0.7862	0.0822	0.8684	0.4295	0.0822	0.5117	0.0000	288.8407	288.8407	0.0866	0.0000	291.0045
2022	5.1000e-004	3.6000e-004	4.1900e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1991	1.1991	3.0000e-005	0.0000	1.1999
2023	2.4000e-004	1.6000e-004	1.9300e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5772	0.5772	1.0000e-005	0.0000	0.5776
Maximum	0.1551	3.0995	4.1168	6.7300e-003	1.5953	0.1671	1.7623	0.8720	0.1671	1.0390	0.0000	585.8068	585.8068	0.1758	0.0000	590.2017

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mowing/Clearing/Grubbing	Site Preparation	9/2/2019	6/30/2021	5	478	
2	Maintenance/Monitoring	Site Preparation	9/2/2019	6/30/2023	5	1000	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mowing/Clearing/Grubbing	Dumpers/Tenders	5	8.00	16	0.38
Mowing/Clearing/Grubbing	Excavators	2	8.00	158	0.38
Mowing/Clearing/Grubbing	Off-Highway Trucks	0	8.00	402	0.38
Mowing/Clearing/Grubbing	Other Construction Equipment	6	8.00	88	0.34
Mowing/Clearing/Grubbing	Rubber Tired Dozers	0	8.00	247	0.40

Mowing/Clearing/Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Mowing/Clearing/Grubbing	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Maintenance/Monitoring	Cranes	0	7.00	231	0.29
Maintenance/Monitoring	Forklifts	0	8.00	89	0.20
Maintenance/Monitoring	Generator Sets	0	8.00	84	0.74
Maintenance/Monitoring	Off-Highway Trucks	0	4.00	402	0.38
Maintenance/Monitoring	Rubber Tired Dozers	0	8.00	247	0.40
Maintenance/Monitoring	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Maintenance/Monitoring	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mowing/Clearing/Grubbing	16	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Maintenance/Monitoring	0	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Mowing/Clearing/Grubbing - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5239	0.0000	0.5239	0.2880	0.0000	0.2880	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0491	1.0183	1.3465	2.1600e-003		0.0554	0.0554		0.0554	0.0554	0.0000	191.4777	191.4777	0.0581	0.0000	192.9294
Total	0.0491	1.0183	1.3465	2.1600e-003	0.5239	0.0554	0.5793	0.2880	0.0554	0.3434	0.0000	191.4777	191.4777	0.0581	0.0000	192.9294

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	0.0102	2.6000e-003	2.0000e-005	5.5000e-004	7.0000e-005	6.1000e-004	1.6000e-004	6.0000e-005	2.2000e-004	0.0000	2.1422	2.1422	1.5000e-004	0.0000	2.1459
Worker	2.0900e-003	1.6700e-003	0.0182	5.0000e-005	4.7700e-003	4.0000e-005	4.8100e-003	1.2700e-003	4.0000e-005	1.3000e-003	0.0000	4.4381	4.4381	1.4000e-004	0.0000	4.4416
Total	2.4400e-003	0.0119	0.0208	7.0000e-005	5.3200e-003	1.1000e-004	5.4200e-003	1.4300e-003	1.0000e-004	1.5200e-003	0.0000	6.5802	6.5802	2.9000e-004	0.0000	6.5875

3.2 Mowing/Clearing/Grubbing - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5778	0.0000	1.5778	0.8673	0.0000	0.8673	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1478	3.0665	4.0550	6.5100e-003		0.1668	0.1668		0.1668	0.1668	0.0000	565.1509	565.1509	0.1750	0.0000	569.5248
Total	0.1478	3.0665	4.0550	6.5100e-003	1.5778	0.1668	1.7446	0.8673	0.1668	1.0341	0.0000	565.1509	565.1509	0.1750	0.0000	569.5248

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e-004	0.0281	7.0800e-003	7.0000e-005	1.6500e-003	1.4000e-004	1.7900e-003	4.8000e-004	1.3000e-004	6.1000e-004	0.0000	6.4098	6.4098	4.3000e-004	0.0000	6.4205
Worker	5.8300e-003	4.4900e-003	0.0497	1.4000e-004	0.0144	1.1000e-004	0.0145	3.8200e-003	1.0000e-004	3.9200e-003	0.0000	12.9511	12.9511	3.7000e-004	0.0000	12.9604
Total	6.7200e-003	0.0326	0.0568	2.1000e-004	0.0160	2.5000e-004	0.0163	4.3000e-003	2.3000e-004	4.5300e-003	0.0000	19.3608	19.3608	8.0000e-004	0.0000	19.3808

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.7000e-004	1.8200e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4438	0.4438	1.0000e-005	0.0000	0.4442
Total	2.1000e-004	1.7000e-004	1.8200e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4438	0.4438	1.0000e-005	0.0000	0.4442

3.3 Maintenance/Monitoring - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.5000e-004	4.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2951	1.2951	4.0000e-005	0.0000	1.2960
Total	5.8000e-004	4.5000e-004	4.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2951	1.2951	4.0000e-005	0.0000	1.2960

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	3.6000e-004	4.1900e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1991	1.1991	3.0000e-005	0.0000	1.1999
Total	5.1000e-004	3.6000e-004	4.1900e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1991	1.1991	3.0000e-005	0.0000	1.1999

3.3 Maintenance/Monitoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.6000e-004	1.9300e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5772	0.5772	1.0000e-005	0.0000	0.5776
Total	2.4000e-004	1.6000e-004	1.9300e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5772	0.5772	1.0000e-005	0.0000	0.5776

Cannon Pump Station

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading - Assume 0.25 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	848.00
tblConstructionPhase	NumDays	20.00	848.00
tblConstructionPhase	NumDays	6.00	848.00
tblConstructionPhase	NumDays	10.00	45.00
tblGrading	AcresOfGrading	0.00	200.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	5,000.00
tblLandUse	LotAcreage	0.00	2.90
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	HaulingTripNumber	2.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	11.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	1.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	25.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.4652	4.6403	4.0702	7.4000e-003	0.0811	0.2276	0.3088	0.0153	0.2125	0.2278	0.0000	649.0322	649.0322	0.1651	0.0000	653.1588
2021	0.5575	5.5156	5.3060	9.7900e-003	0.0940	0.2608	0.3548	0.0188	0.2435	0.2623	0.0000	858.3919	858.3919	0.2174	0.0000	863.8277
2022	0.4988	4.8076	5.2130	9.7300e-003	0.0938	0.2202	0.3139	0.0187	0.2056	0.2244	0.0000	853.5319	853.5319	0.2158	0.0000	858.9263
2023	0.2354	2.2053	2.6387	4.9300e-003	0.0677	0.0990	0.1667	0.0116	0.0924	0.1041	0.0000	432.5665	432.5665	0.1096	0.0000	435.3070
Maximum	0.5575	5.5156	5.3060	9.7900e-003	0.0940	0.2608	0.3548	0.0188	0.2435	0.2623	0.0000	858.3919	858.3919	0.2174	0.0000	863.8277

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Decommissioning	Demolition	4/1/2020	6/30/2023	5	848	
2	Excavation and Shoring	Grading	4/1/2020	6/30/2023	5	848	
3	Pipeline Installation	Trenching	4/1/2020	6/30/2023	5	848	
4	Building Construction	Building Construction	4/1/2020	6/30/2023	5	848	
5	Street Restoration	Paving	5/1/2023	6/30/2023	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Decommissioning	Concrete/Industrial Saws	0	8.00	81	0.73
Decommissioning	Excavators	1	4.00	158	0.38
Decommissioning	Graders	0	8.00	187	0.41
Decommissioning	Off-Highway Trucks	0	6.00	402	0.38
Decommissioning	Other Construction Equipment	1	2.00	172	0.42
Decommissioning	Pavers	1	4.00	130	0.42
Decommissioning	Rollers	1	4.00	80	0.38
Decommissioning	Rubber Tired Dozers	0	8.00	247	0.40
Decommissioning	Scrapers	0	8.00	367	0.48
Decommissioning	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38

Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	7.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Off-Highway Trucks	0	6.00	402	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Decomissioning	6	25.00	11.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Decommissioning - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0681	0.6961	0.7230	1.0700e-003		0.0389	0.0389		0.0358	0.0358	0.0000	94.2900	94.2900	0.0305	0.0000	95.0523
Total	0.0681	0.6961	0.7230	1.0700e-003	2.0000e-005	0.0389	0.0390	0.0000	0.0358	0.0358	0.0000	94.2900	94.2900	0.0305	0.0000	95.0523

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	1.8000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.2203	0.2203	2.0000e-005	0.0000	0.2207
Vendor	3.6700e-003	0.1162	0.0293	2.7000e-004	6.8300e-003	5.7000e-004	7.4000e-003	1.9700e-003	5.4000e-004	2.5100e-003	0.0000	26.5075	26.5075	1.7700e-003	0.0000	26.5518
Worker	0.0110	8.4400e-003	0.0934	2.7000e-004	0.0270	2.1000e-004	0.0272	7.1800e-003	1.9000e-004	7.3700e-003	0.0000	24.3450	24.3450	7.0000e-004	0.0000	24.3625
Total	0.0147	0.1255	0.1229	5.4000e-004	0.0340	7.8000e-004	0.0348	9.1900e-003	7.3000e-004	9.9300e-003	0.0000	51.0729	51.0729	2.4900e-003	0.0000	51.1350

3.2 Decommissioning - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0815	0.8257	0.9530	1.4200e-003		0.0447	0.0447		0.0412	0.0412	0.0000	124.9227	124.9227	0.0404	0.0000	125.9328
Total	0.0815	0.8257	0.9530	1.4200e-003	3.0000e-005	0.0447	0.0448	0.0000	0.0412	0.0412	0.0000	124.9227	124.9227	0.0404	0.0000	125.9328

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.0300e-003	2.3000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.2887	0.2887	2.0000e-005	0.0000	0.2893
Vendor	4.1300e-003	0.1396	0.0353	3.6000e-004	9.0500e-003	2.8000e-004	9.3300e-003	2.6100e-003	2.7000e-004	2.8800e-003	0.0000	34.8549	34.8549	2.2500e-003	0.0000	34.9111
Worker	0.0136	0.0101	0.1139	3.5000e-004	0.0358	2.7000e-004	0.0361	9.5100e-003	2.5000e-004	9.7500e-003	0.0000	31.2108	31.2108	8.4000e-004	0.0000	31.2318
Total	0.0177	0.1507	0.1494	7.1000e-004	0.0450	5.5000e-004	0.0456	0.0122	5.2000e-004	0.0127	0.0000	66.3544	66.3544	3.1100e-003	0.0000	66.4321

3.2 Decommissioning - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.7059	0.9416	1.4200e-003		0.0367	0.0367		0.0338	0.0338	0.0000	124.4804	124.4804	0.0403	0.0000	125.4869
Total	0.0711	0.7059	0.9416	1.4200e-003	3.0000e-005	0.0367	0.0368	0.0000	0.0338	0.0338	0.0000	124.4804	124.4804	0.0403	0.0000	125.4869

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	9.5000e-004	2.2000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.2842	0.2842	2.0000e-005	0.0000	0.2847
Vendor	3.8600e-003	0.1320	0.0333	3.5000e-004	9.0100e-003	2.5000e-004	9.2600e-003	2.6000e-003	2.4000e-004	2.8400e-003	0.0000	34.4146	34.4146	2.1600e-003	0.0000	34.4686
Worker	0.0127	9.0600e-003	0.1047	3.3000e-004	0.0357	2.6000e-004	0.0359	9.4700e-003	2.4000e-004	9.7100e-003	0.0000	29.9776	29.9776	7.6000e-004	0.0000	29.9965
Total	0.0166	0.1420	0.1382	6.8000e-004	0.0449	5.1000e-004	0.0454	0.0121	4.8000e-004	0.0126	0.0000	64.6764	64.6764	2.9400e-003	0.0000	64.7498

3.2 Decommissioning - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0329	0.3195	0.4699	7.1000e-004		0.0161	0.0161		0.0148	0.0148	0.0000	62.2607	62.2607	0.0201	0.0000	62.7641
Total	0.0329	0.3195	0.4699	7.1000e-004	1.0000e-005	0.0161	0.0161	0.0000	0.0148	0.0148	0.0000	62.2607	62.2607	0.0201	0.0000	62.7641

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	3.0000e-004	1.0000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1363	0.1363	1.0000e-005	0.0000	0.1365
Vendor	1.4300e-003	0.0495	0.0149	1.7000e-004	4.5100e-003	6.0000e-005	4.5600e-003	1.3000e-003	5.0000e-005	1.3500e-003	0.0000	16.6761	16.6761	9.5000e-004	0.0000	16.6999
Worker	5.9700e-003	4.1000e-003	0.0483	1.6000e-004	0.0178	1.3000e-004	0.0180	4.7300e-003	1.2000e-004	4.8500e-003	0.0000	14.4303	14.4303	3.4000e-004	0.0000	14.4388
Total	7.4100e-003	0.0539	0.0633	3.3000e-004	0.0225	1.9000e-004	0.0227	6.0700e-003	1.7000e-004	6.2400e-003	0.0000	31.2426	31.2426	1.3000e-003	0.0000	31.2752

3.3 Excavation and Shoring - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0415	0.0000	0.0415	4.4900e-003	0.0000	4.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1681	1.6833	1.5891	2.7000e-003		0.0865	0.0865		0.0808	0.0808	0.0000	235.0928	235.0928	0.0652	0.0000	236.7227
Total	0.1681	1.6833	1.5891	2.7000e-003	0.0415	0.0865	0.1280	4.4900e-003	0.0808	0.0853	0.0000	235.0928	235.0928	0.0652	0.0000	236.7227

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414

3.3 Excavation and Shoring - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0415	0.0000	0.0415	4.4900e-003	0.0000	4.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2042	2.0116	2.0828	3.5700e-003		0.1000	0.1000		0.0935	0.0935	0.0000	311.5107	311.5107	0.0861	0.0000	313.6635
Total	0.2042	2.0116	2.0828	3.5700e-003	0.0415	0.1000	0.1415	4.4900e-003	0.0935	0.0979	0.0000	311.5107	311.5107	0.0861	0.0000	313.6635

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212

3.3 Excavation and Shoring - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0415	0.0000	0.0415	4.4900e-003	0.0000	4.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1827	1.7393	2.0520	3.5600e-003		0.0840	0.0840		0.0785	0.0785	0.0000	310.3662	310.3662	0.0856	0.0000	312.5066
Total	0.1827	1.7393	2.0520	3.5600e-003	0.0415	0.0840	0.1255	4.4900e-003	0.0785	0.0830	0.0000	310.3662	310.3662	0.0856	0.0000	312.5066

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005

3.3 Excavation and Shoring - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0415	0.0000	0.0415	4.4900e-003	0.0000	4.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0853	0.7872	1.0214	1.7800e-003		0.0368	0.0368		0.0344	0.0344	0.0000	155.2330	155.2330	0.0427	0.0000	156.3001
Total	0.0853	0.7872	1.0214	1.7800e-003	0.0415	0.0368	0.0783	4.4900e-003	0.0344	0.0389	0.0000	155.2330	155.2330	0.0427	0.0000	156.3001

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545

3.4 Pipeline Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1163	1.1197	0.8216	1.4900e-003		0.0556	0.0556		0.0527	0.0527	0.0000	128.6044	128.6044	0.0288	0.0000	129.3247
Total	0.1163	1.1197	0.8216	1.4900e-003		0.0556	0.0556		0.0527	0.0527	0.0000	128.6044	128.6044	0.0288	0.0000	129.3247

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414

3.4 Pipeline Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1362	1.3118	1.0638	1.9800e-003		0.0630	0.0630		0.0596	0.0596	0.0000	170.3551	170.3551	0.0377	0.0000	171.2965
Total	0.1362	1.3118	1.0638	1.9800e-003		0.0630	0.0630		0.0596	0.0596	0.0000	170.3551	170.3551	0.0377	0.0000	171.2965

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212

3.4 Pipeline Installation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1232	1.1605	1.0451	1.9700e-003		0.0548	0.0548		0.0519	0.0519	0.0000	169.6934	169.6934	0.0372	0.0000	170.6230
Total	0.1232	1.1605	1.0451	1.9700e-003		0.0548	0.0548		0.0519	0.0519	0.0000	169.6934	169.6934	0.0372	0.0000	170.6230

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005

3.4 Pipeline Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0573	0.5322	0.5180	9.9000e-004		0.0245	0.0245		0.0232	0.0232	0.0000	84.8431	84.8431	0.0184	0.0000	85.3039
Total	0.0573	0.5322	0.5180	9.9000e-004		0.0245	0.0245		0.0232	0.0232	0.0000	84.8431	84.8431	0.0184	0.0000	85.3039

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0951	0.9207	0.7897	1.3700e-003		0.0453	0.0453		0.0420	0.0420	0.0000	118.2843	118.2843	0.0366	0.0000	119.1999
Total	0.0951	0.9207	0.7897	1.3700e-003		0.0453	0.0453		0.0420	0.0420	0.0000	118.2843	118.2843	0.0366	0.0000	119.1999

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1145	1.1015	1.0282	1.8100e-003		0.0523	0.0523		0.0485	0.0485	0.0000	156.7314	156.7314	0.0483	0.0000	157.9393
Total	0.1145	1.1015	1.0282	1.8100e-003		0.0523	0.0523		0.0485	0.0485	0.0000	156.7314	156.7314	0.0483	0.0000	157.9393

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1021	0.9519	1.0088	1.8000e-003		0.0440	0.0440		0.0408	0.0408	0.0000	156.1581	156.1581	0.0480	0.0000	157.3584
Total	0.1021	0.9519	1.0088	1.8000e-003		0.0440	0.0440		0.0408	0.0408	0.0000	156.1581	156.1581	0.0480	0.0000	157.3584

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0475	0.4327	0.5008	9.0000e-004		0.0194	0.0194		0.0180	0.0180	0.0000	78.1038	78.1038	0.0240	0.0000	78.7025
Total	0.0475	0.4327	0.5008	9.0000e-004		0.0194	0.0194		0.0180	0.0180	0.0000	78.1038	78.1038	0.0240	0.0000	78.7025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545

3.6 Street Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8900e-003	0.0393	0.0533	8.0000e-005		1.9900e-003	1.9900e-003		1.8300e-003	1.8300e-003	0.0000	7.2392	7.2392	2.3400e-003	0.0000	7.2978
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.8900e-003	0.0393	0.0533	8.0000e-005		1.9900e-003	1.9900e-003		1.8300e-003	1.8300e-003	0.0000	7.2392	7.2392	2.3400e-003	0.0000	7.2978

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading - Assume 0.25 acres graded per day

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	848.00
tblConstructionPhase	NumDays	6.00	848.00
tblConstructionPhase	NumDays	220.00	848.00
tblConstructionPhase	NumDays	10.00	45.00
tblGrading	AcresOfGrading	0.00	200.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LandUseSquareFeet	0.00	5,000.00
tblLandUse	LotAcreage	0.00	2.90

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	HaulingTripNumber	2.00	25.00
tblTripsAndVMT	HaulingTripNumber	813.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	11.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	1.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	25.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2058	3.5057	4.6887	7.4000e-003	0.0811	0.1797	0.2608	0.0153	0.1796	0.1949	0.0000	649.0322	649.0322	0.1651	0.0000	653.1588
2021	0.2653	4.6093	6.1893	9.7900e-003	0.0940	0.2355	0.3295	0.0188	0.2355	0.2543	0.0000	858.3919	858.3919	0.2174	0.0000	863.8277
2022	0.2596	4.5716	6.1505	9.7300e-003	0.0938	0.2332	0.3270	0.0187	0.2332	0.2519	0.0000	853.5319	853.5319	0.2158	0.0000	858.9263
2023	0.1291	2.2942	3.1293	4.9300e-003	0.0677	0.1183	0.1860	0.0116	0.1183	0.1299	0.0000	432.5665	432.5665	0.1096	0.0000	435.3070
Maximum	0.2653	4.6093	6.1893	9.7900e-003	0.0940	0.2355	0.3295	0.0188	0.2355	0.2543	0.0000	858.3919	858.3919	0.2174	0.0000	863.8277

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days/Week	Num Days	Phase Description
1	Decomissioning	Demolition	4/1/2020	6/30/2023	5	848	
2	Excavation and Shoring	Grading	4/1/2020	6/30/2023	5	848	
3	Pipeline Installation	Trenching	4/1/2020	6/30/2023	5	848	
4	Building Construction	Building Construction	4/1/2020	6/30/2023	5	848	
5	Street Restoration	Paving	5/1/2023	6/30/2023	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Decomissioning	Concrete/Industrial Saws	0	8.00	81	0.73
Decomissioning	Excavators	1	4.00	158	0.38
Decomissioning	Graders	0	8.00	187	0.41
Decomissioning	Off-Highway Trucks	0	6.00	402	0.38
Decomissioning	Other Construction Equipment	1	2.00	172	0.42
Decomissioning	Pavers	1	4.00	130	0.42
Decomissioning	Rollers	1	4.00	80	0.38
Decomissioning	Rubber Tired Dozers	0	8.00	247	0.40
Decomissioning	Scrapers	0	8.00	367	0.48
Decomissioning	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Excavation and Shoring	Concrete/Industrial Saws	1	6.00	81	0.73
Excavation and Shoring	Cranes	1	8.00	231	0.29
Excavation and Shoring	Excavators	2	8.00	158	0.38
Excavation and Shoring	Graders	0	8.00	187	0.41
Excavation and Shoring	Off-Highway Trucks	0	6.00	402	0.38
Excavation and Shoring	Plate Compactors	1	6.00	8	0.43
Excavation and Shoring	Rubber Tired Dozers	0	8.00	247	0.40
Excavation and Shoring	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Installation	Cranes	1	6.00	231	0.29
Pipeline Installation	Generator Sets	1	6.00	84	0.74
Pipeline Installation	Off-Highway Trucks	0	6.00	402	0.38
Pipeline Installation	Other Construction Equipment	1	6.00	172	0.42
Pipeline Installation	Welders	1	4.00	46	0.45
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	0	7.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Off-Highway Trucks	0	6.00	402	0.38

Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Street Restoration	Cement and Mortar Mixers	0	8.00	9	0.56
Street Restoration	Pavers	1	4.00	130	0.42
Street Restoration	Paving Equipment	0	8.00	132	0.36
Street Restoration	Rollers	1	4.00	80	0.38
Street Restoration	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Decommissioning	6	25.00	11.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation and Shoring	7	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	0.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Street Restoration	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Decommissioning - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.5470	0.8129	1.0700e-003		0.0317	0.0317		0.0317	0.0317	0.0000	94.2900	94.2900	0.0305	0.0000	95.0523
Total	0.0264	0.5470	0.8129	1.0700e-003	2.0000e-005	0.0317	0.0317	0.0000	0.0317	0.0317	0.0000	94.2900	94.2900	0.0305	0.0000	95.0523

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	1.8000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.2203	0.2203	2.0000e-005	0.0000	0.2207
Vendor	3.6700e-003	0.1162	0.0293	2.7000e-004	6.8300e-003	5.7000e-004	7.4000e-003	1.9700e-003	5.4000e-004	2.5100e-003	0.0000	26.5075	26.5075	1.7700e-003	0.0000	26.5518
Worker	0.0110	8.4400e-003	0.0934	2.7000e-004	0.0270	2.1000e-004	0.0272	7.1800e-003	1.9000e-004	7.3700e-003	0.0000	24.3450	24.3450	7.0000e-004	0.0000	24.3625
Total	0.0147	0.1255	0.1229	5.4000e-004	0.0340	7.8000e-004	0.0348	9.1900e-003	7.3000e-004	9.9300e-003	0.0000	51.0729	51.0729	2.4900e-003	0.0000	51.1350

3.2 Decommissioning - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0349	0.7247	1.0770	1.4200e-003		0.0420	0.0420		0.0420	0.0420	0.0000	124.9227	124.9227	0.0404	0.0000	125.9328
Total	0.0349	0.7247	1.0770	1.4200e-003	3.0000e-005	0.0420	0.0420	0.0000	0.0420	0.0420	0.0000	124.9227	124.9227	0.0404	0.0000	125.9328

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.0300e-003	2.3000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.2887	0.2887	2.0000e-005	0.0000	0.2893
Vendor	4.1300e-003	0.1396	0.0353	3.6000e-004	9.0500e-003	2.8000e-004	9.3300e-003	2.6100e-003	2.7000e-004	2.8800e-003	0.0000	34.8549	34.8549	2.2500e-003	0.0000	34.9111
Worker	0.0136	0.0101	0.1139	3.5000e-004	0.0358	2.7000e-004	0.0361	9.5100e-003	2.5000e-004	9.7500e-003	0.0000	31.2108	31.2108	8.4000e-004	0.0000	31.2318
Total	0.0177	0.1507	0.1494	7.1000e-004	0.0450	5.5000e-004	0.0456	0.0122	5.2000e-004	0.0127	0.0000	66.3544	66.3544	3.1100e-003	0.0000	66.4321

3.2 Decommissioning - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0348	0.7219	1.0729	1.4200e-003		0.0419	0.0419		0.0419	0.0419	0.0000	124.4804	124.4804	0.0403	0.0000	125.4869
Total	0.0348	0.7219	1.0729	1.4200e-003	3.0000e-005	0.0419	0.0419	0.0000	0.0419	0.0419	0.0000	124.4804	124.4804	0.0403	0.0000	125.4869

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	9.5000e-004	2.2000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.2842	0.2842	2.0000e-005	0.0000	0.2847
Vendor	3.8600e-003	0.1320	0.0333	3.5000e-004	9.0100e-003	2.5000e-004	9.2600e-003	2.6000e-003	2.4000e-004	2.8400e-003	0.0000	34.4146	34.4146	2.1600e-003	0.0000	34.4686
Worker	0.0127	9.0600e-003	0.1047	3.3000e-004	0.0357	2.6000e-004	0.0359	9.4700e-003	2.4000e-004	9.7100e-003	0.0000	29.9776	29.9776	7.6000e-004	0.0000	29.9965
Total	0.0166	0.1420	0.1382	6.8000e-004	0.0449	5.1000e-004	0.0454	0.0121	4.8000e-004	0.0126	0.0000	64.6764	64.6764	2.9400e-003	0.0000	64.7498

3.2 Decommissioning - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0174	0.3610	0.5365	7.1000e-004		0.0209	0.0209		0.0209	0.0209	0.0000	62.2607	62.2607	0.0201	0.0000	62.7641
Total	0.0174	0.3610	0.5365	7.1000e-004	1.0000e-005	0.0209	0.0209	0.0000	0.0209	0.0209	0.0000	62.2607	62.2607	0.0201	0.0000	62.7641

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	3.0000e-004	1.0000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1363	0.1363	1.0000e-005	0.0000	0.1365
Vendor	1.4300e-003	0.0495	0.0149	1.7000e-004	4.5100e-003	6.0000e-005	4.5600e-003	1.3000e-003	5.0000e-005	1.3500e-003	0.0000	16.6761	16.6761	9.5000e-004	0.0000	16.6999
Worker	5.9700e-003	4.1000e-003	0.0483	1.6000e-004	0.0178	1.3000e-004	0.0180	4.7300e-003	1.2000e-004	4.8500e-003	0.0000	14.4303	14.4303	3.4000e-004	0.0000	14.4388
Total	7.4100e-003	0.0539	0.0633	3.3000e-004	0.0225	1.9000e-004	0.0227	6.0700e-003	1.7000e-004	6.2400e-003	0.0000	31.2426	31.2426	1.3000e-003	0.0000	31.2752

3.3 Excavation and Shoring - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0415	0.0000	0.0415	4.4900e-003	0.0000	4.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0662	1.3253	1.8364	2.7000e-003		0.0731	0.0731		0.0731	0.0731	0.0000	235.0928	235.0928	0.0652	0.0000	236.7227
Total	0.0662	1.3253	1.8364	2.7000e-003	0.0415	0.0731	0.1146	4.4900e-003	0.0731	0.0776	0.0000	235.0928	235.0928	0.0652	0.0000	236.7227

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414

3.3 Excavation and Shoring - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0415	0.0000	0.0415	4.4900e-003	0.0000	4.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0877	1.7559	2.4330	3.5700e-003		0.0968	0.0968		0.0968	0.0968	0.0000	311.5107	311.5107	0.0861	0.0000	313.6635
Total	0.0877	1.7559	2.4330	3.5700e-003	0.0415	0.0968	0.1383	4.4900e-003	0.0968	0.1013	0.0000	311.5107	311.5107	0.0861	0.0000	313.6635

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212

3.3 Excavation and Shoring - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0415	0.0000	0.0415	4.4900e-003	0.0000	4.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0873	1.7491	2.4237	3.5600e-003		0.0964	0.0964		0.0964	0.0964	0.0000	310.3662	310.3662	0.0856	0.0000	312.5066
Total	0.0873	1.7491	2.4237	3.5600e-003	0.0415	0.0964	0.1379	4.4900e-003	0.0964	0.1009	0.0000	310.3662	310.3662	0.0856	0.0000	312.5066

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005

3.3 Excavation and Shoring - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0415	0.0000	0.0415	4.4900e-003	0.0000	4.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0437	0.8746	1.2119	1.7800e-003		0.0482	0.0482		0.0482	0.0482	0.0000	155.2330	155.2330	0.0427	0.0000	156.3001
Total	0.0437	0.8746	1.2119	1.7800e-003	0.0415	0.0482	0.0897	4.4900e-003	0.0482	0.0527	0.0000	155.2330	155.2330	0.0427	0.0000	156.3001

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545

3.4 Pipeline Installation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0483	0.7202	0.9619	1.4900e-003		0.0381	0.0381		0.0381	0.0381	0.0000	128.6044	128.6044	0.0288	0.0000	129.3247
Total	0.0483	0.7202	0.9619	1.4900e-003		0.0381	0.0381		0.0381	0.0381	0.0000	128.6044	128.6044	0.0288	0.0000	129.3247

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414

3.4 Pipeline Installation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0615	0.9501	1.2712	1.9800e-003		0.0496	0.0496		0.0496	0.0496	0.0000	170.3551	170.3551	0.0377	0.0000	171.2965
Total	0.0615	0.9501	1.2712	1.9800e-003		0.0496	0.0496		0.0496	0.0496	0.0000	170.3551	170.3551	0.0377	0.0000	171.2965

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212

3.4 Pipeline Installation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0596	0.9434	1.2649	1.9700e-003		0.0487	0.0487		0.0487	0.0487	0.0000	169.6934	169.6934	0.0372	0.0000	170.6230
Total	0.0596	0.9434	1.2649	1.9700e-003		0.0487	0.0487		0.0487	0.0487	0.0000	169.6934	169.6934	0.0372	0.0000	170.6230

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005

3.4 Pipeline Installation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0291	0.4703	0.6319	9.9000e-004		0.0241	0.0241		0.0241	0.0241	0.0000	84.8431	84.8431	0.0184	0.0000	85.3039
Total	0.0291	0.4703	0.6319	9.9000e-004		0.0241	0.0241		0.0241	0.0241	0.0000	84.8431	84.8431	0.0184	0.0000	85.3039

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.9000e-004	0.0135	4.0700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2400e-003	3.5000e-004	1.0000e-005	3.7000e-004	0.0000	4.5480	4.5480	2.6000e-004	0.0000	4.5545

3.5 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0473	0.6927	0.9306	1.3700e-003		0.0356	0.0356		0.0356	0.0356	0.0000	118.2843	118.2843	0.0366	0.0000	119.1999
Total	0.0473	0.6927	0.9306	1.3700e-003		0.0356	0.0356		0.0356	0.0356	0.0000	118.2843	118.2843	0.0366	0.0000	119.1999

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0000e-003	0.0317	7.9900e-003	7.0000e-005	1.8600e-003	1.6000e-004	2.0200e-003	5.4000e-004	1.5000e-004	6.9000e-004	0.0000	7.2293	7.2293	4.8000e-004	0.0000	7.2414

3.5 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0601	0.9137	1.2298	1.8100e-003		0.0464	0.0464		0.0464	0.0464	0.0000	156.7314	156.7314	0.0483	0.0000	157.9393
Total	0.0601	0.9137	1.2298	1.8100e-003		0.0464	0.0464		0.0464	0.0464	0.0000	156.7314	156.7314	0.0483	0.0000	157.9393

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1300e-003	0.0381	9.6200e-003	1.0000e-004	2.4700e-003	8.0000e-005	2.5400e-003	7.1000e-004	7.0000e-005	7.9000e-004	0.0000	9.5059	9.5059	6.1000e-004	0.0000	9.5212

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0582	0.9072	1.2236	1.8000e-003		0.0455	0.0455		0.0455	0.0455	0.0000	156.1581	156.1581	0.0480	0.0000	157.3584
Total	0.0582	0.9072	1.2236	1.8000e-003		0.0455	0.0455		0.0455	0.0455	0.0000	156.1581	156.1581	0.0480	0.0000	157.3584

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0500e-003	0.0360	9.0800e-003	1.0000e-004	2.4600e-003	7.0000e-005	2.5200e-003	7.1000e-004	6.0000e-005	7.7000e-004	0.0000	9.3858	9.3858	5.9000e-004	0.0000	9.4005

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0284	0.4522	0.6112	9.0000e-004		0.0225	0.0225		0.0225	0.0225	0.0000	78.1038	78.1038	0.0240	0.0000	78.7025
Total	0.0284	0.4522	0.6112	9.0000e-004		0.0225	0.0225		0.0225	0.0225	0.0000	78.1038	78.1038	0.0240	0.0000	78.7025

ID-4 CRA Crossing Refurbishment

SARCCUP: ID-4 CRA Crossing Refurbishment - South Coast Air Basin, Annual

**SARCCUP: ID-4 CRA Crossing Refurbishment
South Coast Air Basin, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	39.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Grading and Excavation Only
- Construction Phase - Grading and Excavation Only
- Off-road Equipment -
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment -
- Trips and VMT - Project-Specific Assumptions
- Grading - Assume equivalent of 1 acre graded per day by a backhoe.
- Architectural Coating - Grading and Excavation Only
- Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,500.00	0.00
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	740.00	0.00
tblConstructionPhase	NumDays	50.00	0.00
tblConstructionPhase	NumDays	75.00	260.00
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	30.00	0.00
tblGrading	AcresOfGrading	0.00	260.00
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	39.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	10.00	25.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1303	1.2599	0.9013	1.8400e-003	0.0872	0.0617	0.1489	0.0148	0.0572	0.0720	0.0000	165.3769	165.3769	0.0376	0.0000	166.3177
2020	0.0375	0.3646	0.2767	5.9000e-004	0.0646	0.0170	0.0816	8.7200e-003	0.0158	0.0245	0.0000	51.8440	51.8440	0.0119	0.0000	52.1419
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.1303	1.2599	0.9013	1.8400e-003	0.0872	0.0617	0.1489	0.0148	0.0572	0.0720	0.0000	165.3769	165.3769	0.0376	0.0000	166.3177

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	3/31/2019	5	0	
2	Grading	Grading	4/1/2019	3/27/2020	5	260	
3	Site Preparation	Site Preparation	6/8/2019	6/7/2019	5	0	
4	Building Construction	Building Construction	11/2/2019	11/1/2019	5	0	
5	Paving	Paving	9/3/2022	9/2/2022	5	0	
6	Architectural Coating	Architectural Coating	11/19/2022	11/18/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 260

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Cranes	1	8.00	231	0.29
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Welders	1	4.00	46	0.45

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0538	0.0000	0.0538	5.8100e-003	0.0000	5.8100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1145	1.1321	0.7685	1.3100e-003		0.0607	0.0607		0.0563	0.0563	0.0000	115.2743	115.2743	0.0351	0.0000	116.1515
Total	0.1145	1.1321	0.7685	1.3100e-003	0.0538	0.0607	0.1145	5.8100e-003	0.0563	0.0621	0.0000	115.2743	115.2743	0.0351	0.0000	116.1515

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.9100e-003	5.8000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7259	0.7259	5.0000e-005	0.0000	0.7273
Vendor	3.9100e-003	0.1153	0.0294	2.5000e-004	6.2100e-003	7.5000e-004	6.9600e-003	1.7900e-003	7.2000e-004	2.5100e-003	0.0000	24.2531	24.2531	1.7000e-003	0.0000	24.2956
Worker	0.0119	9.4600e-003	0.1028	2.8000e-004	0.0270	2.2000e-004	0.0272	7.1800e-003	2.0000e-004	7.3700e-003	0.0000	25.1236	25.1236	7.9000e-004	0.0000	25.1433
Total	0.0159	0.1277	0.1328	5.4000e-004	0.0334	9.8000e-004	0.0344	9.0200e-003	9.3000e-004	9.9400e-003	0.0000	50.1026	50.1026	2.5400e-003	0.0000	50.1662

SARCCUP: ID-4 CRA Crossing Refurbishment - South Coast Air Basin, Annual

**SARCCUP: ID-4 CRA Crossing Refurbishment - Mitigated
South Coast Air Basin, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	39.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Grading and Excavation Only
- Construction Phase - Grading and Excavation Only
- Off-road Equipment -
- Off-road Equipment - Project-Specific Equipment
- Off-road Equipment -
- Trips and VMT - Project-Specific Assumptions
- Grading - Assume equivalent of 1 acre graded per day by a backhoe.
- Architectural Coating - Grading and Excavation Only

Construction Off-road Equipment Mitigation - Tier 3 for Equipment >50 HP

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,500.00	0.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	740.00	0.00

tblConstructionPhase	NumDays	50.00	0.00
tblConstructionPhase	NumDays	75.00	260.00
tblConstructionPhase	NumDays	55.00	0.00
tblConstructionPhase	NumDays	30.00	0.00
tblGrading	AcresOfGrading	0.00	260.00
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	39.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	10.00	25.00

2.0 Emissions Summary

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0638	0.8194	0.9858	1.8400e-003	0.0872	0.0401	0.1273	0.0148	0.0400	0.0549	0.0000	165.3769	165.3769	0.0376	0.0000	166.3177
2020	0.0192	0.2577	0.3107	5.9000e-004	0.0646	0.0125	0.0771	8.7200e-003	0.0125	0.0212	0.0000	51.8440	51.8440	0.0119	0.0000	52.1419
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0638	0.8194	0.9858	1.8400e-003	0.0872	0.0401	0.1273	0.0148	0.0400	0.0549	0.0000	165.3769	165.3769	0.0376	0.0000	166.3177

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	3/31/2019	5	0	
2	Grading	Grading	4/1/2019	3/27/2020	5	260	
3	Site Preparation	Site Preparation	6/8/2019	6/7/2019	5	0	
4	Building Construction	Building Construction	11/2/2019	11/1/2019	5	0	
5	Paving	Paving	9/3/2022	9/2/2022	5	0	
6	Architectural Coating	Architectural Coating	11/19/2022	11/18/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 260

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Cranes	1	8.00	231	0.29
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Welders	1	4.00	46	0.45
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0538	0.0000	0.0538	5.8100e-003	0.0000	5.8100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0479	0.6917	0.8530	1.3100e-003		0.0391	0.0391		0.0391	0.0391	0.0000	115.2743	115.2743	0.0351	0.0000	116.1515
Total	0.0479	0.6917	0.8530	1.3100e-003	0.0538	0.0391	0.0929	5.8100e-003	0.0391	0.0449	0.0000	115.2743	115.2743	0.0351	0.0000	116.1515

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.9100e-003	5.8000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7259	0.7259	5.0000e-005	0.0000	0.7273
Vendor	3.9100e-003	0.1153	0.0294	2.5000e-004	6.2100e-003	7.5000e-004	6.9600e-003	1.7900e-003	7.2000e-004	2.5100e-003	0.0000	24.2531	24.2531	1.7000e-003	0.0000	24.2956
Worker	0.0119	9.4600e-003	0.1028	2.8000e-004	0.0270	2.2000e-004	0.0272	7.1800e-003	2.0000e-004	7.3700e-003	0.0000	25.1236	25.1236	7.9000e-004	0.0000	25.1433
Total	0.0159	0.1277	0.1328	5.4000e-004	0.0334	9.8000e-004	0.0344	9.0200e-003	9.3000e-004	9.9400e-003	0.0000	50.1026	50.1026	2.5400e-003	0.0000	50.1662

Chino Basin Production Wells, Refurbishment and Treatment System Site

SARCCUP: IEUA Well Site - South Coast Air Basin, Annual

SARCCUP: Chino Basin Production Well Site
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1,000.00	User Defined Unit	1.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10	Operational Year		2020	
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Extraction Well

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	393.00
tblConstructionPhase	NumDays	1.00	393.00
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1474	1.4474	1.1996	2.8600e-003	0.0359	0.0721	0.1080	9.7300e-003	0.0682	0.0779	0.0000	255.9987	255.9987	0.0506	0.0000	257.2625
2020	0.1350	1.3311	1.1749	2.8400e-003	0.0357	0.0632	0.0989	9.6800e-003	0.0598	0.0694	0.0000	250.9647	250.9647	0.0498	0.0000	252.2087
Maximum	0.1474	1.4474	1.1996	2.8600e-003	0.0359	0.0721	0.1080	9.7300e-003	0.0682	0.0779	0.0000	255.9987	255.9987	0.0506	0.0000	257.2625

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	9/30/2020	5	393	
2	Building Construction	Building Construction	4/1/2019	9/30/2020	5	393	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38
Well Drilling	Rubber Tired Dozers	0	7.00	247	0.40
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Well Drilling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0870	0.8765	0.6880	1.7200e-003		0.0435	0.0435		0.0418	0.0418	0.0000	152.0522	152.0522	0.0340	0.0000	152.9027
Total	0.0870	0.8765	0.6880	1.7200e-003	0.0000	0.0435	0.0435	0.0000	0.0418	0.0418	0.0000	152.0522	152.0522	0.0340	0.0000	152.9027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.9300e-003	3.9000e-004	0.0000	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.4803	0.4803	4.0000e-005	0.0000	0.4812
Vendor	5.4700e-003	0.1615	0.0412	3.5000e-004	8.6900e-003	1.0600e-003	9.7500e-003	2.5100e-003	1.0100e-003	3.5200e-003	0.0000	33.9543	33.9543	2.3800e-003	0.0000	34.0139
Worker	0.0119	9.4600e-003	0.1028	2.8000e-004	0.0270	2.2000e-004	0.0272	7.1800e-003	2.0000e-004	7.3700e-003	0.0000	25.1236	25.1236	7.9000e-004	0.0000	25.1433
Total	0.0174	0.1729	0.1444	6.3000e-004	0.0359	1.2900e-003	0.0372	9.7400e-003	1.2200e-003	0.0110	0.0000	59.5582	59.5582	3.2100e-003	0.0000	59.6383

3.2 Well Drilling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0804	0.8132	0.6827	1.7200e-003		0.0387	0.0387		0.0371	0.0371	0.0000	149.4363	149.4363	0.0335	0.0000	150.2747
Total	0.0804	0.8132	0.6827	1.7200e-003	0.0000	0.0387	0.0387	0.0000	0.0371	0.0371	0.0000	149.4363	149.4363	0.0335	0.0000	150.2747

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.7900e-003	3.7000e-004	0.0000	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4730	0.4730	3.0000e-005	0.0000	0.4739
Vendor	4.6400e-003	0.1471	0.0371	3.5000e-004	8.6500e-003	7.2000e-004	9.3700e-003	2.4900e-003	6.9000e-004	3.1800e-003	0.0000	33.5656	33.5656	2.2400e-003	0.0000	33.6216
Worker	0.0109	8.4000e-003	0.0930	2.7000e-004	0.0269	2.1000e-004	0.0271	7.1400e-003	1.9000e-004	7.3300e-003	0.0000	24.2214	24.2214	7.0000e-004	0.0000	24.2389
Total	0.0156	0.1573	0.1304	6.2000e-004	0.0357	9.4000e-004	0.0367	9.6800e-003	8.9000e-004	0.0106	0.0000	58.2600	58.2600	2.9700e-003	0.0000	58.3343

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0430	0.3981	0.3672	5.1000e-004		0.0273	0.0273		0.0252	0.0252	0.0000	44.3883	44.3883	0.0133	0.0000	44.7215
Total	0.0430	0.3981	0.3672	5.1000e-004		0.0273	0.0273		0.0252	0.0252	0.0000	44.3883	44.3883	0.0133	0.0000	44.7215

SARCCUP: IEUA Well Site - South Coast Air Basin, Annual

SARCCUP: IEUA Well Site - Mitigated
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1,000.00	User Defined Unit	1.00	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Extraction Well

Construction Phase - Project-Specific Schedule

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Off-road Equipment - Project-Specific Equipment

Trips and VMT - Project-Specific Daily Maximum. All phases occur concurrently. Therefore, daily max applied to only one of the overlapping phases. Off-Highway Trucks included as Vendor Trucks.

Demolition -

Grading -

Architectural Coating - Concrete Block construction, no coating required.

Construction Off-road Equipment Mitigation - Tier 3: Equipment >50 HP

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	393.00
tblConstructionPhase	NumDays	1.00	393.00
tblConstructionPhase	PhaseEndDate	8/19/2019	9/30/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	9/30/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	4/1/2019
tblLandUse	LandUseSquareFeet	0.00	1,000.00
tblLandUse	LotAcreage	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00

2.0 Emissions Summary

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0726	1.2816	1.5254	2.8600e-003	0.0359	0.0638	0.0997	9.7300e-003	0.0638	0.0735	0.0000	255.9987	255.9987	0.0506	0.0000	257.2625
2020	0.0706	1.2604	1.5044	2.8400e-003	0.0357	0.0632	0.0989	9.6800e-003	0.0631	0.0728	0.0000	250.9647	250.9647	0.0498	0.0000	252.2087
Maximum	0.0726	1.2816	1.5254	2.8600e-003	0.0359	0.0638	0.0997	9.7300e-003	0.0638	0.0735	0.0000	255.9987	255.9987	0.0506	0.0000	257.2625

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Drilling	Site Preparation	4/1/2019	9/30/2020	5	393	
2	Building Construction	Building Construction	4/1/2019	9/30/2020	5	393	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Well Drilling	Forklifts	1	8.00	89	0.20
Well Drilling	Generator Sets	1	8.00	84	0.74
Well Drilling	Graders	0	8.00	187	0.41
Well Drilling	Off-Highway Trucks	0	6.00	402	0.38

Well Drilling	Rubber Tired Dozers	0	7.00	247	0.40
Well Drilling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Drilling	3	25.00	14.00	25.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Well Drilling - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0397	0.8260	1.0131	1.7200e-003		0.0436	0.0436		0.0436	0.0436	0.0000	152.0522	152.0522	0.0340	0.0000	152.9027
Total	0.0397	0.8260	1.0131	1.7200e-003	0.0000	0.0436	0.0436	0.0000	0.0436	0.0436	0.0000	152.0522	152.0522	0.0340	0.0000	152.9027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.9300e-003	3.9000e-004	0.0000	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.4803	0.4803	4.0000e-005	0.0000	0.4812
Vendor	5.4700e-003	0.1615	0.0412	3.5000e-004	8.6900e-003	1.0600e-003	9.7500e-003	2.5100e-003	1.0100e-003	3.5200e-003	0.0000	33.9543	33.9543	2.3800e-003	0.0000	34.0139
Worker	0.0119	9.4600e-003	0.1028	2.8000e-004	0.0270	2.2000e-004	0.0272	7.1800e-003	2.0000e-004	7.3700e-003	0.0000	25.1236	25.1236	7.9000e-004	0.0000	25.1433
Total	0.0174	0.1729	0.1444	6.3000e-004	0.0359	1.2900e-003	0.0372	9.7400e-003	1.2200e-003	0.0110	0.0000	59.5582	59.5582	3.2100e-003	0.0000	59.6383

3.2 Well Drilling - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0395	0.8218	1.0079	1.7200e-003		0.0433	0.0433		0.0433	0.0433	0.0000	149.4363	149.4363	0.0335	0.0000	150.2747
Total	0.0395	0.8218	1.0079	1.7200e-003	0.0000	0.0433	0.0433	0.0000	0.0433	0.0433	0.0000	149.4363	149.4363	0.0335	0.0000	150.2747

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.7900e-003	3.7000e-004	0.0000	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4730	0.4730	3.0000e-005	0.0000	0.4739
Vendor	4.6400e-003	0.1471	0.0371	3.5000e-004	8.6500e-003	7.2000e-004	9.3700e-003	2.4900e-003	6.9000e-004	3.1800e-003	0.0000	33.5656	33.5656	2.2400e-003	0.0000	33.6216
Worker	0.0109	8.4000e-003	0.0930	2.7000e-004	0.0269	2.1000e-004	0.0271	7.1400e-003	1.9000e-004	7.3300e-003	0.0000	24.2214	24.2214	7.0000e-004	0.0000	24.2389
Total	0.0156	0.1573	0.1304	6.2000e-004	0.0357	9.4000e-004	0.0367	9.6800e-003	8.9000e-004	0.0106	0.0000	58.2600	58.2600	2.9700e-003	0.0000	58.3343

3.3 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0155	0.2828	0.3679	5.1000e-004		0.0190	0.0190		0.0190	0.0190	0.0000	44.3883	44.3883	0.0133	0.0000	44.7215
Total	0.0155	0.2828	0.3679	5.1000e-004		0.0190	0.0190		0.0190	0.0190	0.0000	44.3883	44.3883	0.0133	0.0000	44.7215

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0155	0.2813	0.3660	5.1000e-004		0.0189	0.0189		0.0189	0.0189	0.0000	43.2684	43.2684	0.0133	0.0000	43.5997
Total	0.0155	0.2813	0.3660	5.1000e-004		0.0189	0.0189		0.0189	0.0189	0.0000	43.2684	43.2684	0.0133	0.0000	43.5997

